

A. E. FOOTE, M. D.
223 Belmont Ave.,
Philadelphia, Pa.

Surgeon General's Office

LIBRARY

ANNEX
Section,

No.

99558.





CLINICAL
MIDWIFERY.

CLINICAL MIDWIFERY.

COMPRISING

THE HISTORIES OF FIVE HUNDRED AND FORTY-FIVE
CASES OF DIFFICULT, PRETERNATURAL,
AND COMPLICATED LABOUR.

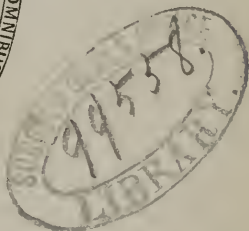
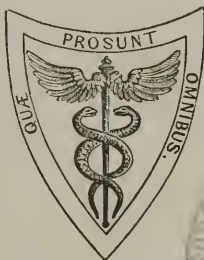
WITH COMMENTARIES.

✓
BY

ROBERT LEE, M.D., F.R.S.,

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, LONDON;
PHYSICIAN TO THE BRITISH LYING-IN HOSPITAL AND ST. MARVLEBONE INFIRMARY;
LECTURER ON MIDWIFERY AT ST. GEORGE'S HOSPITAL.

FIRST AMERICAN FROM THE SECOND LONDON EDITION.



PHILADELPHIA:
LEA AND BLANCHARD.

1849.

ADVERTISEMENT

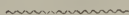
TO THE FIRST EDITION.



THE following Reports comprise the most important practical details of all the cases of difficult parturition which have come under my observation during the last fifteen years, and of which I have preserved written histories. They have now been collected and arranged for publication, in the hope that they may be found to illustrate, confirm, or correct the rules laid down by systematic writers for the treatment of difficult labours, and supply that course of clinical instruction in midwifery, the want of which has been so often experienced by practitioners at the commencement of their career.

ADVERTISEMENT

TO THE SECOND EDITION.



THIS edition contains the histories of one hundred and forty-five additional cases of difficult, preternatural, and complicated labour, which have come under my observation during the last five years.

CONTENTS.



REPORT I.

Observations on the present State of Operative Midwifery, and the Histories of eighty Cases in which the Forceps was employed . . . Pages 9-46

REPORT II.

Difficult Labours from Distortion of the Pelvis, Swelling of the Soft Parts, Convulsions, Hydrocephalus in the Fœtus, and other Causes, in which Delivery was effected by the Operation of Craniotomy . . . 47-81

REPORT III.

Induction of Premature Labour in Cases of Distortion of the Pelvis—Cancer of the Gravid Uterus—Uterine and Ovarian Cysts and Tumours—Organic and Nervous Diseases of the Heart—Dropsy of the Amnion—Obstinate Vomiting during Pregnancy—Hemorrhage from the Bowels—Chorea and Insanity during Pregnancy 82-120

REPORT IV.

The Histories of one hundred and one Cases of Preternatural Labours 121-152

REPORT V.

The Histories of sixty-three Cases of Placental Presentation . . . 153-186

REPORT VI.

The Histories of forty-four Cases of Uterine Hemorrhage, in the latter Months of Pregnancy, during Labour, and after Parturition . . . Pages 187-207

REPORT VII.

The Histories of thirty-five Cases of Retention of the Placenta . . . 208-221

REPORT VIII.

The Histories of forty-eight Cases of Puerperal Convulsions . . . 222-235



CLINICAL MIDWIFERY.

FIRST REPORT.

OBSERVATIONS ON THE PRESENT STATE OF OPERATIVE MIDWIFERY, AND THE HISTORIES OF EIGHTY CASES OF DIFFICULT PARTURITION, IN WHICH THE FORCEPS WAS EMPLOYED.

IF we compare the Reports of the principal Lying-in Hospitals of Great Britain, France, and Germany, and examine the doctrines inculcated by the best systematic writers of these countries, it is impossible to avoid being struck with the want of uniformity which prevails in all that relates to the operations of midwifery. Although the causes of difficult parturition must be nearly the same in every part of Europe, cases of instrumental delivery are far more numerous in some countries and institutions than in others, and the method of operating is widely different. In England there are few practitioners of judgment and experience, who have frequent recourse to the forceps, or who employ it before the orifice of the uterus is fully dilated, and the head of the child has descended so low into the pelvis, that an ear can be felt, and the relative position of the head to the pelvis accurately ascertained. The instrument is not employed in this country where the pelvis is much distorted, or where the soft parts are in a rigid state, but it is had recourse to where delivery becomes necessary in consequence of exhaustion, hemorrhage,

convulsions, and other accidents, which endanger the life of the mother. It is used solely with the view of supplying that power which the uterus does not possess.

The employment of the long forceps in cases of distorted pelvis has been recommended by Baudelocque, Boivin, La-chapelle, Capuron, Maygrier, Velpeau, and Flammant, whose works contain ample instructions for its use, before the head of the child has entered the brim of the pelvis; and the last of these writers has expressed his belief, that the instrument is more frequently required while the head of the child remains above the superior aperture of the pelvis, than after it has descended into the cavity. These authors also recommend the forceps in presentations of the nates, and to extract the head after the expulsion of the trunk and extremities of the child.

The operation of craniotomy is performed by all British practitioners of reputation, whether the child be alive or dead, if the condition of the mother is such as to render delivery absolutely necessary, and the head of the child is beyond the reach of the forceps, or where, from distortion of the pelvis, or rigidity of the os uteri and vagina, it cannot be extracted if its volume is not reduced. This operation is performed from a conviction that if neglected to be done at a sufficiently early period, the mother's life will be sacrificed, and the life of the mother is considered as much more important than that of the child.

Some Continental authors affirm, that in England we have frequently recourse to craniotomy, without due consideration, and without regard to the life of the child; and whatever the state of the parent may be, they refuse to open the head till they can obtain certain evidence that it is dead. "Nothing could excuse the conduct of the practitioner," observes Baudelocque, "who would perforate the head without previously knowing with certainty that it was not alive, a circumstance which can alone authorize us to employ the perforator and crotchet."

The same opinion is expressed by Velpeau, who maintains that even when the child is dead, if the diameter of the pelvis is only fifteen lines, or the whole hand cannot be passed into the cavity of the uterus to turn the child, the Cæsarean operation is to be performed. When the small diameter is from twelve to fifteen lines, he considers hysterotomy to be necessary, whether the child be alive or dead, and that it is also

required if the child be alive, when the diameter measures from eighteen lines to two inches and a quarter. Craniotomy, he thinks, must be rarely necessary, for in more than twenty thousand labours it was performed only twelve times by M. Lachapelle. According to Stein and Plenck, a conjugate diameter of three inches, two and three-quarters, two and a half, or two and a quarter, prevents either nature or the forceps from effecting the delivery. Therefore, if the child be living, the Cæsarean section must be performed, or if the child be dead, the perforator must be used. These authors also affirm, that a conjugate diameter of two inches renders delivery impossible. If the child should be alive, the Cæsarean section must be performed; if the child be dead, they say it is scarcely possible to open the head.

The Reports of two hundred and fifty-eight cases of Cæsarean section have been collected by Michaelis, one hundred and forty-four of which occurred in the last, and one hundred and ten in the present century. Of these cases, one hundred and forty proved fatal. Velpeau states, that the operation was performed twenty-eight times between 1810 and 1820, and sixty-one times from 1821 to 1830. Dr. Churchill says, the operation was performed three hundred and sixteen times, between 1750 and 1841, and that the mortality was 52·8 per cent. for the mothers. It is well known that many unfortunate cases of Cæsarean operation have occurred in France and Germany, of which no reports have been published, and those who have recently visited the Continent have assured me that this operation, notwithstanding its fatality, is becoming more and more common.

In Great Britain, the Reports of at least twenty-seven cases are to be found, and in twenty-five of them it was fatal to the mother. If correctly informed, there is no eminent accoucheur now practising in London, who has been present at the performance of the operation upon the living body, or who would recommend it, if delivery could be effected by the perforator and crotchet.

The discordance which exists between Continental and British practitioners and authors, is not less strikingly displayed respecting the induction of premature labour. In numerous cases it has been successfully employed in this country, and it is now ascertained that the operation is attended with little risk to the mother, and that nearly one-half of the children are born alive and continue to live where

it is performed after the seventh month. In cases of great distortion of the pelvis, the induction of premature labour at an early period of pregnancy, before the sixth month, is likewise known to be a safe operation, and to render craniotomy and the Cæsarean section wholly unnecessary.

In Germany and Holland, it has frequently been employed by May, Weidman, Ch. Wenzel, and others, with satisfactory results. Baudelocque regarded the induction of premature labour as a useless, if not an injurious operation, and Dugès has recently characterized it as fatal to the mother, and the source of most frightful abuse. In the table of the *Maternité* by Baudelocque, Boivin, and Lachapelle, including nearly sixty thousand cases of labour, there is no account of any case in which premature labour was induced. The last of these writers begins her strictures on the practice by declaring that she had never either employed "that method, or seen others have recourse to it."

The propriety of inducing premature labour was brought under the consideration of the Academy of Medicine, Paris, in 1827, and they decided that the practice was unjustifiable under any circumstances.

A comparative view of the frequency of forceps and craniotomy cases in ten Lying-in Hospitals.

Hospitals.	Number of labours.	Forceps cases.	Proportion.	Craniotomy cases.	Proportion.
Dublin, Clarke . . .	10,199	14	1 in 728	49	1 in 248
Do., Collins	16,654	27	1 in 617	118	1 in 141
Paris, Baudelocque .	17,388	31	1 in 561	6	1 in 2898
Do., Lachapelle . . .	22,243	75	1 in 293	12	1 in 1854
Do., Boivin	20,517	96	1 in 214	16	1 in 1282
Vienna, Boer	9,589	35	1 in 274	13	1 in 737
Heidelberg, Naegele	1,711	55	1 in 31	1	1 in 1711
Berlin, Kluge	1,111	68	1 in 16	6	1 in 185
Dresden, Carus . . .	2,549	184	1 in 14	9	1 in 283
Berlin, Siebold . . .	2,093	300	1 in 7	1	1 in 2093

From these conflicting statements, it is clear that the first principles of Operative Midwifery have not yet been established, and that there is no other branch of surgery, at the present time, in such a rude condition. It is unnecessary to

do more than point out the pernicious effect which this must exercise upon those who have been compelled to commence the practice of midwifery, without having enjoyed the opportunity of witnessing difficult cases, or seeing any important operations performed. Had a faithful history been given of all the fortunate and unfortunate cases of artificial delivery referred to in the preceding table, had the circumstances been accurately described, which led to the employment of the forceps and perforator, and the consequences which resulted from their use, it is impossible that so great a discordance of opinion should so long have existed respecting the method of treatment in cases of difficult labour.

In this REPORT, I propose to give a succinct account of all the cases which have fallen under my observation, in which recourse has been had to the midwifery forceps, or it has been proposed to have recourse to it, with the view of illustrating the various circumstances which render it necessary to employ this instrument, of determining the positive good we derive from it, and the injurious consequences which result when it is rashly and injudiciously applied.

(CASE 1.) On the 28th June, 1823, I was present at the delivery of a woman, æt. thirty, who had been in labour nearly three days and nights, under the care of a midwife. It was the first child. The orifice of the uterus was not fully dilated, and it was very rigid. The vagina swollen and tender, the abdomen tense and painful on pressure. Tongue loaded; urgent thirst; countenance flushed; pulse rapid and feeble. The labour-pains, for ten or twelve hours, had been gradually becoming more feeble and irregular. The head of the child was strongly compressed and much swollen, and the greater part of it was above the brim of the pelvis. An ear could not be felt, and the hollow of the sacrum was empty. It was determined by the practitioner who had charge of the case to attempt to deliver with the long forceps, and he observed, before proceeding to introduce the blades, that it was a case in which the superiority of the long over the short forceps would be observed in a striking manner; and that in less than a quarter of an hour the delivery would be safely and easily completed, and the life of the child preserved. The blades of the forceps were, however, introduced with great difficulty, and still greater was experienced in getting them to lock. Strong traction was then

made for several minutes, and the blades slipped off the head. They were re-introduced, and the efforts to extract renewed, and continued till the instrument again slipped off. This happened several times, but the attempt to deliver with the long forceps was not abandoned till the operator was exhausted with fatigue. The head was then perforated, and extracted with the crotchet. Violent inflammation and sloughing of the vagina followed, and about three weeks after delivery, it was ascertained that a large vesico-vaginal fistula existed. She was abandoned by her husband, and was afterwards reduced, in consequence of this misfortune, to the greatest possible misery. This was the first time I ever saw the forceps applied in actual practice, and I was struck with the vast difference which exists between the application of the forceps to the head of an artificial fœtus put into a phantom, and the head of a living child. I was led to suspect, from what I now witnessed, that a dangerous degree of boldness and hardihood might readily be acquired by long practice upon a phantom, where this was not combined with attendance on cases of difficult labour. The unfortunate termination of this case made me resolve carefully to watch the progress and termination of all the cases of difficult labour which I could meet with, and preserve accurate histories of them, which has been done to the present time.

(CASE 2.) On Saturday morning, July 12th, 1823, I saw a woman, æt. twenty-six, also a patient of a public institution, who had been nearly fifty hours in labour with her first child. The membranes had been ruptured on the Thursday evening, and the pains had been gradually becoming more and more feeble during the afternoon and night of Friday. On Saturday morning the pains had nearly ceased. The pulse quick, skin hot, the pupils were unusually dilated, and there were slight convulsive tremors of the muscles of the face and extremities. The orifice of the uterus was fully dilated. The external parts were rigid, hot, and swollen. The head of the child was firmly pressed into the brim of the pelvis, but the greater part of it had not passed through it. The bones overlapped much, and a large tumour of the scalp was formed. A copious venesection was employed, and soon after two severe fits of convulsion took place. The blades of the long forceps were applied, but they slipped off the head as in the former case, when an attempt was made to extract, and the delivery was completed by craniotomy. In a few hours, con-

sciousness returned, and no more fits were experienced, but on the third day violent inflammation of the uterus took place.

(CASE 3.) On the 29th August, 1824, two P.M., I was called to a patient residing at 7, Harford-place, Drury-lane, who had been in labour more than twenty-four hours. The os uteri was rigid, and little more than half dilated; the membranes were ruptured; the head had not passed into the cavity of the pelvis. Pulse strong and frequent; tongue loaded; much thirst; abdomen tender. The pains were regular, but had little effect upon the head. Twelve ounces of blood were drawn from the arm, and an opiate clyster administered. At nine P.M., the os uteri fully dilated, and the head so low in the pelvis that an ear could be felt. As symptoms of exhaustion were beginning to appear, and I thought it probable the head would not be expelled without assistance, I applied the short forceps with great care, and completed the delivery in half an hour. The child was alive, and the mother recovered very well.

(CASE 4.) On the 16th of December, 1828, I was called to a woman residing in Currier-street, St. Giles's, who had been in strong labour upward of forty-eight hours. The head was jammed in the brim of the pelvis, and the pains had nearly gone off. Pulse 120. Great restlessness and delirium. The vagina hot, swollen, and tender. Discharges very offensive. Abdomen tense and painful. Retention of urine. To satisfy my own mind, I endeavoured to apply the forceps, but the attempt to pass the blades produced so much pain, that I was forced to desist, and open the head. An hour and a half elapsed before I could extract the head with the crotchet, and not till the bones of the head and my fingers were much torn. Hemorrhage followed the removal of the placenta, but it was arrested by pressure over the fundus uteri, and the application of cold to the external parts. She recovered. Mr. Curtis, of Dorking, was present.

(CASE 5.) On the 4th of February, 1829, Mr. Watkins requested me to see a patient who had been in labour two days and two nights. It was her second labour. The os uteri was only half dilated, and the head, swollen and firmly compressed by the brim of the pelvis, was so high up, that an ear could not be reached with the finger. The vagina was dry and swollen. The pains continued, but had no effect upon the head. Mr. W. had attempted to apply the forceps before my arrival, but he could not get the blades over the

head. After perforation, great difficulty was experienced in extracting the head with the crotchet, and we did not succeed till the point of the instrument was passed up and fixed on the outside, near the angle of the jaw. A great part of the bones of the cranium had been torn before this was done. Slight uterine inflammation followed. This woman had once before been delivered by craniotomy.

(CASE 6.) In the summer of 1831, I saw a patient in the Middlesex Hospital with Dr. H. Ley, in whom extensive sloughing of the vagina had followed the use of the forceps. The instrument had been applied by a practitioner of experience and reputation. The child was dead.

(CASE 7.) In the same year, Mr. Prout, surgeon to the British Lying-in Hospital, requested me to accompany him to a case of difficult labour in Ogle-street, from a thick cicatrix of the vagina. This patient had likewise been delivered some years before with the forceps, and the accoucheur was an eminent operator and writer on midwifery instruments. I am uncertain if the first child was alive.

(CASE 8.) April, 1832, I was called to a patient of the St. Marylebone Infirmary, who had been in labour nearly sixty hours, and was attended by one of the parochial midwives. The os uteri was thick, rigid, and imperfectly dilated, the head was squeezed firmly into the brim of the pelvis, and an ear could not be felt. Ergot had been given by the midwife at different times during the progress of the labour, and it was said to have increased the strength of the pains. Mr. Hutchinson, then house-surgeon to the Infirmary, agreed with me in thinking that the forceps could do nothing but mischief, and that it was necessary to deliver without delay by opening and extracting the head. This I immediately did, and from the long-continued efforts required to drag the head into the cavity of the pelvis, it was evident that the delivery could have been accomplished in no other way with safety to the mother. She recovered rapidly. On the 11th of April, 1833, I was again called to deliver this patient, but suffering from indisposition at the time, Mr. Hutchinson attended her for me. He found the scalp tumid, the bones riding, external parts swollen. Pains strong for thirty hours. He opened the head, and found little difficulty in extracting it. In the autumn of 1834, I was called to deliver this patient in her third labour. She was on this occasion attended by two young and inexperienced accoucheurs, and she had neglected

to inform them of what had occurred in her two previous labours. Before I saw her, the ergot of rye had been liberally administered, and repeated attempts made to deliver her with the forceps, the blades of which had lacerated the vagina extensively on the left side. The vagina and external parts enormously swollen and inflamed. The head so fast wedged in the brim of the pelvis, that it was difficult to pass the finger around it. The abdomen was tense and painful on pressure, and the bladder filled with urine. The pulse extremely rapid and feeble. There was incessant vomiting and complete exhaustion. I immediately opened the head, and extracted it with the crotchet, but she died in a few hours.

(CASE 9.) After the occurrence of this case I endeavoured to point out as clearly as possible, to the practitioner who had thus so incautiously applied the forceps, the danger of using the instrument for the purpose of drawing the head of the child into the cavity of the pelvis where the brim is distorted. The impression made upon his mind was, however, very transitory, for not many years after, he again attempted to deliver with the forceps in a case where the head was impacted in the brim, and the vagina enormously swollen. When I saw the patient, one blade of the forceps was so firmly fixed between the head and front of the pelvis, that I had great difficulty in withdrawing it. After perforation, strong efforts were required to complete the delivery, and she died within forty-eight hours.

(CASE 10.) On the 20th of October, 1832, I saw a patient in the lying-in ward of the St. Marylebone Infirmary, who had been in labour with her first child upwards of thirty hours. The occiput was to the right ischium, and the left ear was near the symphysis pubis. The head had made little progress for twenty hours. After dilating the external parts, the blades of the short forceps, covered with leather, were easily applied and locked, and the head extracted without much force. The child was alive, and had sustained no injury.

(CASE 11.) In the summer of 1833, a practitioner of little experience was engaged to attend a woman in labour, who resided in one of the courts between Princes-street and Great Windmill-street. She had previously been delivered of several children without difficulty. On this occasion the labour was protracted, and, without any consultation, recourse was had to the forceps, and she was delivered of a

dead child. Soon after, the usual symptoms of ruptured uterus supervened, and she did not long survive. In the evening I saw the body, but was not permitted to make any examination of the uterus. It was with difficulty that a coroner's inquest was prevented from being held. After this occurrence, the practitioner soon left England.

(CASE 12.) About the same time, a medical practitioner, who had been extensively employed as an accoucheur at the west end of London, met with a case of very protracted labour, in which it became evident that the child would not be expelled without artificial assistance. He called into consultation an obstetrical physician of the greatest celebrity, who has been accustomed in his lectures to recommend the use of the long forceps. At six in the morning, when he was called, the head of the child had not passed through the brim of the pelvis, and was completely beyond the reach of the short forceps. At the end of four or five hours, during which time the head had not descended further into the cavity of the pelvis, it was determined to deliver with the long forceps. The blades of the instrument were passed up, and the head grasped and extracted, after the employment of much force; but scarcely had the delivery been accomplished, though there was no hemorrhage, than the patient became restless, sick, and faint, and threw her arms incessantly around her. She died within three hours, with symptoms of ruptured uterus. The child was alive, and has been reared.

(CASE 13.) In June, 1833, Mr. Evans, of Mortimer-street, requested me to see a patient who had been nearly thirty hours in labour with her first child. Though the pains were strong, and the head was at the outlet of the pelvis, it had made no progress for ten hours. Twelve ounces of blood were drawn from the arm, and a stimulating enema thrown up. After waiting several hours without any change taking place in the situation of the head, and exhaustion occurring, I applied the forceps with great ease, and delivered in less than half an hour. I took off the blades when the head was passing, to prevent laceration of the perineum. The child breathed, but died in a few minutes. The umbilical cord was twisted three times round the neck; and this might have been the cause of the difficulty experienced in the labour, and the death of the child. Ever since the occurrence of this case, I have endeavoured, and sometimes successfully, to ascertain, before applying the forceps, whether the cord surrounded the neck and pulsated.

(CASE 14.) On the 27th of August, 1833, a patient of the St. Marylebone Infirmary had been forty hours in labour with her fourth child. The head was at the outlet of the pelvis, and as the pains were still strong and regular, there was a great probability that it would in time have been expelled without artificial assistance. I thought, however, that it would sustain less injury if extracted with the forceps, than if left to suffer further from the pressure, as it was much swollen. The instrument was easily applied, and the head extracted with little force. The child was alive, and did well, and the mother was not hurt.

(CASE 15.) About the same time, I was called to a case of protracted labour from rigidity of the parts at the outlet of the pelvis. The patient was advanced in life and it was her first child. The os uteri was fully dilated, and the head advanced so far into the pelvis that an ear could be felt. The head was much swollen, and all the soft parts. The pains were feeble. I had no difficulty in passing the blades of the forceps over the sides of the head, but could not, without much, and indeed by any degree of force, get them to lock. The gentleman who consulted me made several strong attempts to lock the blades, but he could not succeed, and he determined, contrary to my advice, to endeavour to extract the head with the blades unlocked, which he succeeded in doing, to my surprise, and thereby saving the life of the child. The perineum was, however, extensively torn, and I have not since felt justified in operating with the blades of the forceps unlocked.

(CASE 16.) A lady, æt. thirty; first pregnancy; labour commenced at three o'clock, A.M., Sunday, 10th of November, 1833. At eight P.M. the os uteri was considerably dilated, but the pains were irregular and ineffective. Thirty drops of laudanum were administered by the medical attendant, and the same quantity given two hours after. At four A.M. of Monday, the membranes were artificially ruptured, and a drachm of ergot given in four doses, at intervals of twenty minutes. It produced nausea, but had no effect upon the uterine contractions. In the afternoon of Monday, when I first saw the patient, the head had advanced so little through the brim, that the ear was touched with difficulty, behind the symphysis pubis. The os uteri was imperfectly dilated and rigid. The vagina and perineum also rigid. The pains strong and regular. Pulse 80. Head clear;

urine passed with difficulty. Twelve ounces of blood were taken, an enema administered, and warm fomentations applied to the external parts. At four o'clock on Tuesday morning, the head was in the same situation, the os uteri still imperfectly dilated, and the vagina swollen, and tender, and the neck of the bladder compressed. The pains had almost entirely gone off. The abdomen was tense and painful. Tongue loaded. Urgent thirst. The tone of the voice was completely altered. Her strength was so greatly reduced, that it was clear she would never expel the child without help. It was my conviction that we had left her too long in labour, from the desire to save the child. I made an unsuccessful attempt to deliver with the forceps; the second blade could not be passed and the instrument locked without occasioning great pain, and the perforator was employed. The force afterwards required to extract the head with the crotchet, made us regret that we had not interfered sooner. No bad consequences followed.

(CASE 17.) Jan. 3d, 1834, at eleven o'clock at night, I was requested to see Mrs. G., æt. forty, who had been upwards of thirty-six hours in her first labour. The membranes had been ruptured twenty-four hours. In the morning a dose of laudanum had been given, and about mid-day three doses of the ergot of rye. The pains had nearly gone off. The head was so low that an ear could be touched behind the symphysis pubis; and the anterior lip of the os uteri, puffy and tender, was pressed down between them, during each pain. The vagina was hot, tender, and excessively rigid, as was the perineum. The labia were swollen to twice the natural size. Fourteen ounces of blood were drawn from the arm, a stimulating clyster thrown up, the bladder relieved by the catheter, and warm fomentations applied to the external parts. When the pains came on, the anterior lip of the os uteri was pressed up with two fingers. The pains returned with greater force and regularity, and for a time I hoped that the head would be expelled; but at four o'clock on the following morning, the contractions of the uterus entirely ceased, and she fell suddenly into a state of the most alarming exhaustion. The head was sufficiently low for the application of the forceps; but the soft parts were so swollen and tender, that it was impossible to introduce the blades, and the head was opened. Although I extracted the head very slowly, so rigid was the perineum,

that it gave way in a slight degree in spite of the most careful support. Inflammation and sloughing of the vagina followed, but she ultimately recovered without any injury to the bladder or rectum : and I have since delivered her of a living child at the full period with the forceps. The cicatrix in the vagina was extensively lacerated during the extraction of the head without any serious mischief resulting from it. Blood-letting and all other means were had recourse to in the second labour, and the forceps was not applied till she was completely exhausted. The cicatrix of the vagina was too thick and extensive to admit of any relief from its division with the scalpel. The child could not possibly have been preserved in this instance without the forceps.

(CASE 18.) On the 26th of January, 1834, a lady, æt. twenty-six, had been thirty hours in labour with her first child. The head had remained in the pelvis ten hours without making any progress, and she felt much exhausted. The parts were not very rigid, and no difficulty was experienced in applying the forceps, and extracting the head, but in doing this the perineum was slightly torn. The cord was twisted firmly round the neck, and it did not pulsate. The child never breathed. Severe inflammation of the vagina took place, but no sloughing. In a few months the health was restored, and she has since had three living children without difficulty. The ergot of rye had been given before I saw this patient, and it increased the pains, without advancing the head.

(CASE 19.) On the 19th of August, 1834, I attended a lady, æt. thirty-six, who had a very protracted labour from rigidity of the os uteri and feeble irregular uterine action. Dr. H. Davies saw her when the pains had nearly ceased, and great exhaustion had taken place. Blood-letting, cathartics, and anodynes had produced little effect upon the os uteri in the earlier part of the labour. Dr. Davies applied the forceps, and soon extracted the head, but the child never breathed in a regular manner, and soon died in convulsions. Dangerous hemorrhage followed the birth of the child, and after the placenta was extracted, a severe rigor took place, and for many minutes the pulse could scarcely be felt. She, however, ultimately recovered, but her life was exposed to the greatest danger by delaying so long to deliver, in the expectation that the head of the child would come sufficiently low for the forceps.

(CASE 20.) On the 12th March, 1835, I was present at the delivery of a patient in a public institution, where the forceps was applied, and the bones of the fetal head were severely injured. She was *æt.* twenty-seven. It was her first child, and she had been forty hours in labour. The pains had not ceased altogether, but the head had ceased to advance for many hours, and it had not cleared the brim, though the ear behind the symphysis pubis could be felt. A practitioner of the greatest experience and dexterity in using the forceps applied it, but the head could not be extracted without employing great force for a considerable period. The child breathed for a few seconds, and then died. On the following day I examined the head, and found the bones much injured, the posterior part of the right parietal being completely detached from the occipital bone. The patient recovered slowly.

(CASE 21.) April, 1835, I delivered a patient in the lying-in ward of the St. Marylebone Infirmary with the forceps. The funis was round the neck once, and it pulsated very freely. The pulsations of the heart continued for some time, but the child could not be made to breathe. Inflammation of the uterus followed. Had this case been left to nature, which I now think it might safely have been for some hours longer, it is not improbable but the child might have been expelled alive without any artificial assistance.

(CASE 22.) Mrs. P. *æt.* twenty-six. April, 1835. First pregnancy: full period. Returned home after midnight from a large dinner party, at which she had partaken of a variety of dishes and wines, and had been seated near a large fire. Labour came on at four A.M., and soon after she became incoherent, and said she felt her teeth falling out of her head. On attempting to drink some warm tea, she bit a large piece from the edge of the china cup, and crushed it between her teeth. Violent convulsions immediately followed. Copious venesection and an enema gave no relief. In an hour and a half the head of the child was within reach of the forceps, and it was applied, and the child was soon extracted alive. By feeling with the finger the umbilical cord round the neck pulsating, it was known to be alive when the forceps was applied. Although every precaution was taken to prevent injury being inflicted on the mother during the time the head was being extracted, the perineum was extensively lacerated, from the impossibility of retaining

her for an instant in the same position. She died at eleven A.M. The child has been reared. Dr. Golding saw this case.

(CASE 23.) On the 18th July, 1835, I was called to a case of protracted labour by Mr. Harding, in which the head of the child had been in the cavity of the pelvis for six or eight hours without advancing. The os uteri was fully dilated. The pains were strong and regular. The left ear was behind the symphysis pubis. The blades were easily passed and locked and with very little force the head was extracted, without any mark or injury. It was alive. Great hemorrhage followed, but she recovered, and probably would have done quite as well without the forceps.

(CASE 24.) On the 24th Oct. 1835, a case of dangerous uterine hemorrhage, from the placenta being detached from the fundus uteri, occurred in the St. Andrew's Parochial Infirmary. The membranes were ruptured, but the flooding continued, and the head being in the pelvis, I applied the forceps and easily extracted the child, but it was dead. The funis was round the neck.

(CASE 25.) At ten A.M., 6th Dec. 1835, I was called to Mrs. —, æt. thirty-six, at 7, Farm-street, Berkeley-square, who had been upwards of thirty hours in labour with her second child. The funis, without pulsation, was hanging out of the external parts, the meconium escaping, and the discharge from the vagina very fetid. The head and right arm were jammed in the brim of the pelvis, the orifice of the uterus fully dilated, and an extensive cicatrix with a thin edge high up in the posterior wall of the vagina. I opened and extracted the head slowly with the craniotomy forceps, so that no part of the vagina was torn. The gentleman who had charge of the case informed me that he had delivered this patient of her first child with the forceps two years before, after she had remained in labour three days and nights. The child was dead, and her recovery was so favourable, that there was no suspicion of the vagina having been injured.

(CASE 26.) On the 1st March, 1836, a middle-aged woman, addicted to the use of stimulants, was attacked with convulsions in the first stage of labour. Twenty-five ounces of blood being taken from the arm without any relief, I applied the forceps, and delivered her of a dead child. The fits continued afterwards till she died. The head was examined

after death, and the vessels of the brain were reported to have been unusually distended with blood. Both this and Case 22 would probably have ended fatally, whatever plan of treatment had been adopted.

(CASE 27.) Aug. 1836, I saw a case of puerperal convulsions in the lying-in ward of the St. Marylebone Infirmary. The patient had been long in labour, and had experienced fourteen severe fits. The head being sufficiently low and the parts dilated, I applied the forceps, and delivered with great ease, but the child was dead. She had only one slight fit after delivery, and no bad effect followed the use of the forceps.

(CASE 28.) On the 16th Aug. 1836, Mrs. —, æt. twenty-five, being in the eighth month of her fourth pregnancy, dined on curry and rice, and ate bacon and eggs at tea. At one o'clock on the morning of the 17th, she awoke with violent pain in the back part of the head, and sickness, for which she took a strong cathartic. Dr. Webster was called to her soon after, and ordered five grains of calomel and an anti-spasmodic draught, which relieved the symptoms. During the forenoon she remained in a drowsy state, without complaining. At midday a fit of convulsion occurred. At three P.M. another and more violent fit followed. I saw her soon after this. The pulse was extremely rapid and feeble, and it became altogether imperceptible at the wrist on the abstraction of eight ounces of blood from the arm. More blood would not flow from a large orifice in the vein. The orifice of the uterus was slightly open, and the labour pains were commencing. I ruptured the membranes, and discharged the liquor amnii. An hour after, four ounces of blood were drawn from the temple by cupping, when the pulse again became imperceptible. At six P.M. the os uteri being fully dilated, and the head in the pelvis, I delivered with the forceps. The child was dead. The fits continued, and she died at eight P.M.

(CASE 29.) On the 21st Sept. 1836, at three P.M. I saw a patient, æt. twenty-five, in the St. Marylebone Infirmary, who had been in labour forty-six hours. Since midnight the head had remained stationary. The os uteri was fully dilated. The greater part of the head had passed through the brim of the pelvis. An ear was felt. I applied the forceps, but the head would not move, though I used much force and for a considerable time. After perforation, the

head was extracted with difficulty by the craniotomy forceps. No bad effect followed. Mr. Bishopp was present.

(CASE 30.) In the evening of the 24th Aug. 1837, I was requested to see a lady who had been in labour with her first child since one o'clock in the morning, during the whole of which time the pains had been feeble and irregular. At four P.M. a dose of laudanum had been given. At nine, the pains were weak, and she appeared much exhausted. The orifice of the uterus was not fully dilated, and the greater part of the head was still above the brim of the pelvis. Near the umbilicus, a part of the uterus projected so much from some limb of the child pressing against it, that we dreaded rupture of the uterus if the labour were allowed to continue. The forceps was applied by the gentleman in attendance, and strong efforts made to extract the head, but it would not advance, and recourse was had to the perforator. The perineum was torn while the shoulders were passing. She recovered, and has since had a living child without artificial assistance.

(CASE 31.) On the 15th Aug. 1837, Mr. Jones, Soho-square, requested me to see a case of face presentation in the St. Anne's Parochial Infirmary. The head had not passed completely into the cavity of the pelvis. The face was greatly swollen, and also the vagina. The head had long been stationary; and as the pains were becoming more and more feeble, it was certain the delivery would never be completed without artificial assistance. I applied the blades of the forceps with great difficulty over the sides of the head, but found it impossible to lock them. The head was perforated, and the force afterwards required to extract it with the craniotomy forceps was so great, that I regretted having endeavoured to deliver before lessening the volume of the head. The patient, however, was not injured by the forceps.

(CASE 32.) Tuesday morning, the 2d Jan. 1838, I was called by Mr. Wise to a case of protracted labour in Portland-street. The patient was a young woman who had been in labour with her first child since the Friday evening. The os uteri was fully dilated, and the head so low in the pelvis, that the ear could be felt behind the pubes. The pains had been gradually diminishing in force, and had no effect upon the head. The bladder was filled with urine. After passing the catheter, I applied the forceps readily and locked the blades, but the head could not be moved, although I con-

tinned for about half an hour to employ even more force than I considered justifiable in attempting to extract the head. After perforation, so much force was required to draw the head through the pelvis with the craniotomy forceps, that I regretted having attempted to save the child, and still more when I was afterwards informed by Mr. W. that he had felt the funis around the neck and without pulsation, before the forceps had been applied.

(CASE 33.) Mr. Jorden, of Lower Belgrave-street, Surgeon-Accoucheur to the St. George's Lying-in Institution, on the 10th of April, 1838, at eleven P.M., requested me to see a private patient, who had been unusually long in labour, in consequence of the face of the child presenting. The head had not advanced for eight or ten hours. The face was much swollen. There was not the slightest probability that the labour would ever be completed without artificial assistance. The forceps was applied, and the child soon extracted alive and uninjured. The mother recovered favourably. It is impossible for a case to occur, in which the employment of the forceps can be attended with more satisfactory results. Without the forceps the life of the child must have been destroyed, and the labour could not have been completed.

(CASE 34.) Mr. Cathrow, of Weymouth-street, requested me to see a patient in labour, on the 20th of April, 1838. She was thirty-five years of age. It was the first child, and the labour had continued so long that she was quite exhausted. The head was sufficiently low for the forceps, and the blades were easily applied, but by no force that we dared exert would the head move forward, and it was perforated. The extraction of the head with the crotchet was a tedious and difficult operation. It proved that we formed a very erroneous idea of the case when we determined to use the forceps.

(CASE 35.) On the 11th of Aug. 1838, I was requested by Mr. Cocke, of Cleveland-street, to see a case of difficult labour, in which he had made an unsuccessful attempt to deliver with the forceps. It was the first child. The labour commenced at twelve o'clock on Wednesday, and had continued till five A.M. Friday. The forehead was behind the symphysis pubis, and for many hours the head had not advanced; it entirely filled the cavity of the pelvis. Mr. Cocke had applied the blades of the forceps, and locked them with great care; but though he made strong traction cautiously

for a considerable time, the head could not be made to advance, and he had recourse to perforation. So great was the difficulty afterwards experienced in extracting the head with the crotchet, that he sent to request my assistance; and I did not succeed without much difficulty in delivering with the craniotomy forceps. No mischief, I believe, followed.

(CASE 36.) Mr. Walker, of Marylebone-street, called me, on the 11th of Aug. 1838, to deliver a woman, who had been thirty-six hours in labour. It was the first. She was a little woman, without being distorted: she had previously borne a dead child at the seventh month. The os uteri fully dilated: vagina not rigid; the head was in the pelvis, and lying transversely. There was no difficulty in applying and locking the blades of the forceps, and extracting the head; but in doing this the perineum was slightly torn. The child was alive, and the mother recovered, and suffered no great inconvenience from the injury she had sustained. The head had made no progress for several hours. The pulse was remarkably slow, and she was at times incoherent; and between the pains she lay in a state approaching to insensibility. The state of the brain rendered it necessary to expedite the delivery.

(CASE 37.) In the month of Dec. 1838, a woman, æt. twenty-four, was admitted into St. George's Hospital, who had been delivered of her first child nine weeks before. The perineum, recto-vaginal septum, for about an inch and a half, and sphincter ani, were all destroyed, and the power of retaining the contents of the rectum entirely lost. The case admitted of no relief. This wretched state had resulted from laceration and sloughing of the parts, from the employment of the forceps in her first labour, and immense force exerted to extract the head. The child was dead.

(CASE 38.) In the summer of 1839, I saw a patient some miles from London, whose labour was protracted by a tumour within the pelvis, probably ovarian. She had been delivered before repeatedly, and all her labours had been natural. After she became pregnant on this occasion, she thought, from feeling two distinct swellings in the abdomen, that she had twins. When I first saw her, she had been in labour nearly twenty-four hours. The head had scarcely begun to enter the brim of the pelvis, the cavity of which was occupied by a tumour the size of a cricket-ball, or larger. Whenever a pain came on, the tumour was pressed down before the

head. The forceps had been applied, but the head could not be brought before the tumour, though great and long-continued efforts had been made to drag it forward. I opened the head, and had much difficulty afterwards in drawing it down with the crotchet. In 1841, the same person being in the seventh month of pregnancy, Mr. Pickering, of Hammer-smith, requested me to make an internal examination, to determine the propriety of inducing premature labour. As the tumour had risen out of the pelvis, had not enlarged, and the brim was occupied with the lower part of the uterus, I thought it best not to interfere. She went to the full period, and was safely delivered of a living child.

(CASE 39.) On the 8th of July, 1839, I saw a woman, æt. thirty-seven, who had been in labour with her first child about fifty hours. The os uteri was not fully dilated, and it was thick, and rigid, and was pressed down with head through the brim of the pelvis. Pulse 60; tongue loaded. The pains were strong and regular, but did not cause the head to advance. An attempt had been made to deliver with the forceps, but only one blade could be introduced. Four hours after, complete exhaustion. Perforation and extraction difficult.

(CASE 40.) On the 9th of July, 1839, at eleven A.M., I saw another case of protracted labour, in which it was proposed by the accoucheur, and urged strongly, to deliver with the forceps, though the head was so firmly impacted in the brim of the pelvis, that it was impossible to pass the finger around it without much difficulty, and giving great pain. The bones were squeezed over one another, and all the soft parts swollen and tender. It was the first child, and the labour had lasted the whole of the Sunday night and Monday until the Tuesday forenoon, when I first saw the case. The pulse was then excessively rapid, tongue loaded, countenance swollen; great exhaustion. The meconium was passing, and the discharge from the vagina was fetid. Perforation. Extraction difficult. For several days after she was in a state of great danger from retention of urine, violent inflammation of the vagina, and fever. The parts did not slough.

(CASE 41.) On the 26th of July, 1839, another case, very similar to the preceding, occurred to me in private practice, but in it there was distortion of the pelvis, and a hard cicatrix of the vagina, the effect of injurious pressure in a former labour. Here, also, it was proposed to use the forceps.

(CASE 42.) On the 22d of July, 1839, at three A.M., Mr. Webster, of Connaught-terrace, requested me to see Mrs. H——, who had been in labour thirty hours with her second child. A great part of the head was in the cavity of the pelvis, and an ear could readily be felt behind the symphysis pubis. The head had not advanced for many hours, and the pains, which had been declining in strength, had no effect in pressing it forward. The bones overlapped one another, and there was a large tumour of the scalp formed. The meconium was passing. It was evident the head would never be expelled by the natural efforts, and we determined to use the forceps, the blades of which were introduced and locked without much difficulty, and the head easily extracted. The child was alive, and the mother recovered in the most favourable manner. The benefit derived from the forceps was most striking in this case. This patient, after being long in labour with her first child, and threatened with convulsions, was delivered by craniotomy. The head of the child was jammed in the brim of the pelvis; and an injudicious attempt to apply the forceps to the head having failed, it was opened.

(CASE 43.) On the 16th of Feb. 1839, Mr. Tucker consulted me respecting a case of puerperal convulsions. It was the first child, and no relief followed bloodletting and the other remedies employed. The head was within reach of the forceps, and the blades were applied and locked, but the head would not move, and the patient was so incessantly restless and agitated, that I did not persevere long, feeling certain that laceration would be produced if I did. Perforation. The patient continued in fits till she died.

(CASE 44.) On the 2d of Aug. 1839, Mr. Kennedy, of Tavistock-square, called me to see a patient, æt. thirty-one, who had been nearly sixty hours in labour with her first child. The head had passed into the cavity of the pelvis, where it was so firmly impacted, that it was evident the expulsion of it would never be accomplished by the natural efforts. I ascertained by auscultation that the child was alive. I had no difficulty in applying the blades of Smellie's short forceps covered with leather, the instrument referred to in all the cases now related. Half an hour at least relapsed before I could succeed in extracting the head, and this could not be effected without employing great force, much more than I would have ventured to employ had I not been certain, from hearing the pulsation of the heart of the fœtus, that it was

alive when the operation was commenced. The child showed no signs of life after birth, and inflammation and sloughing of the vagina followed. The bladder and rectum happily escaped uninjured. It would have been much better practice in this case, had I abandoned the attempt to deliver with the forceps, when the head could not be extracted by moderate traction. The unwillingness to resort to craniotomy, knowing that the child was alive, led me to commit what I believe to have been a practical error, and which would have been avoided had the condition of the mother only been taken into consideration.

(CASE 45.) A lady, æt. thirty-seven, at the full period of her first pregnancy, under the care of —, first began to experience labour-pains at six A.M., on the 9th of May, 1840. The labour continued during the whole day and night, and during the following day till six P.M. The head of the child was then in the pelvis, and was much elongated and swollen. An ear was felt behind the symphysis pubis. The pains had for some hours been gradually becoming more and more feeble, and had ceased to press the head forward. The discharge from the vagina was offensive; the vagina hot and tender. The meconium escaping; the catheter required. No delirium. — had applied the forceps, but finding much difficulty in locking the blades, had withdrawn them, and was of opinion, when we met in consultation, that it would be right to perforate without delay. Believing the child to be alive, I applied the forceps, and extracted the head in a few minutes, with less than half the force I had employed in many of the preceding cases. The cord was firmly twisted around the neck of the child, and it was dead. Inflammation and sloughing of the vagina followed, and the canal was afterwards nearly closed up by the cicatrix. This was overcome by bougies, and she became pregnant, and has since been safely delivered of a living child without any artificial help whatever.

(CASE 46.) Sunday, 16th of May, 1841, a woman residing in Devonshire-street, nearly fifty years of age, had been in labour with her first child since the Friday evening before. She had been married fifteen years without ever becoming pregnant. The first stage of labour had been extremely protracted, from rigidity of the os uteri. When I saw her, the head had nearly cleared the brim, and an ear was felt. The vagina and perineum were so rigid, that it was resolved, before using

the forceps, to see what the effect of a moderate bleeding would be. The pulsations of the fetal heart were heard, and there were no constitutional symptoms to render immediate delivery necessary. Six hours after the bleeding she had become greatly exhausted, and it was obvious that the child would never be born by the natural efforts. The forceps was applied, and a living child extracted. Neither mother nor child sustained the slightest injury.

(CASE 47.) On the 14th January, 1841, in the St. Mary-lebone Infirmary, a woman, *æt.* thirty, had been twenty-four hours in labour. The head was pressing on the perineum. There had been no progress for some hours, and as the gentleman in attendance seemed impatient of delay, I applied the forceps, and easily extracted the child alive. But the operation, being unnecessary, was unjustifiable, and ought not to have been performed, on the ground above stated.

(CASE 48.) In the summer of 1841, I attended a lady, *æt.* thirty, in private practice, who had become completely exhausted after twenty-four hours of active labour with her first child. The first stage was quickly completed, and the head descended to the outlet, and pressed upon the perineum, but there was no power to effect its expulsion. It appeared as if the uterus had been destitute of the nervous energy required for the occasion. As the head was not large, and the outlet of the pelvis was not contracted, I thought artificial delivery necessary, and Mr. Blagden concurred in the opinion that the forceps should be applied, which was done with the utmost care. The child was extracted alive, but the head was much bruised, and one of the eyes narrowly escaped destruction. It, however, recovered perfectly, and the mother also.

(CASE 49.) On the 10th of October, 1841, Mr. Brett requested me to see a patient in Berwick-street, *æt.* thirty, who had been twenty hours in her second labour. In her first, she had been left nearly fifty hours, and when exhausted was delivered by craniotomy. On this occasion the os uteri was speedily dilated, but the head became impacted in the brim, and a cautious but unsuccessful attempt was made by Mr. Brett to draw it forward on the pelvis. When I saw the patient some time after, the head had descended so low that an ear was felt behind the pubes, though the head had not passed completely through the brim. The pains were violent and incessant, but they had little effect upon the head, and it

appeared unsafe to leave her longer undelivered. I applied the forceps, and used as much extracting force as I thought justifiable, without effect, and was on the point of abandoning the forceps: Mr. Brett, however, made one strong effort more, and succeeded in extracting the head, without injury to it or the mother.

(CASE 50.) On the 13th of November, 1841, at two o'clock in the morning, a patient of Mr. Owen's, Holborn, in the seventh month of pregnancy, was alarmed by a smell of fire in the nursery. She left her bed, and ran hastily to her children, but it was a false alarm. Soon after, she was seized with convulsions, and at eleven A.M., when I saw her, she was insensible, and had experienced several severe fits. The pulse was 60, teeth clenched. Pupils contracted; breathing slow and stertorous. Another fit soon came on, when her head was suddenly drawn to the right side, the pupils became dilated, and the pulse and respiration quickened. Mr. Owen had taken blood from the arm soon after the first fit, given croton oil and calomel, and an enema, and applied vinegar-and-water to the head. Being a peculiarly thin delicate woman, more than ten additional ounces of blood could not be drawn with safety from the temples by cupping, the pulse becoming after its extraction so feeble as scarcely to be felt. At four P.M. she was insensible, and the fits had been severe, with short intervals. She had the appearance of a person dying from exhaustion; the pulse was rapid and feeble; mouth half open; pupils contracted. The os uteri being fully dilated, and the head in the pelvis, I applied the forceps with great ease, and delivered; but the child was dead. She never recovered her consciousness, and died in fifteen hours.

(CASE 51.) On the 14th of January, 1841, I delivered a patient of the St. Marylebone Infirmary, with the forceps. She had been twenty-four hours in her first labour. The head was at the outlet, lying across the pelvis. The meconium was passing, and the child had not been felt to move for many hours. In extracting the head, I saw the perineum would give way in spite of every precaution, and the blades were removed. In no long time the head was expelled by the natural efforts, but the child was dead.

(CASE 52.) Mr. Brett requested me, in 1841, to see a case of protracted labour under his care, in which we resolved to have recourse to artificial delivery. The patient was above

thirty years of age, and it was her first child. The parts at the outlet of the pelvis were so unyielding that the head could not pass, and she became exhausted. The first stage had been very protracted, and bloodletting had been employed without much benefit. Mr. Brett applied the forceps, and extracted the child alive, and the mother sustained no injury.

(CASE 53.) On the 14th of July, 1842, Mr. Radcliffe had a lady, æt. forty, under his care, who became completely exhausted in twenty-two hours from the commencement of her first labour. She had been in very delicate health during the whole period of pregnancy, and in the latter months had become much emaciated, without any evident cause. The head of the child had been pressing for five hours against the soft parts at the outlet of the pelvis when I first saw her; they were not rigid, and the finger could be passed around the head without pain. The pulsations of the fetal heart could not be heard. There was a considerable discharge of blood between the pains. The pulse was feeble, countenance sunk, and breathing quick. The head was extracted with the forceps in ten minutes, but great care was required to prevent injury of the perineum. The child was dead. The placenta immediately followed, with a great coagulum of blood. The mother sustained no injury.

(CASE 54.) On the 12th of August, I delivered a patient of Mr. Fitzpatrick's with the forceps, but the child was dead. She was thirty-nine years of age, and it was the first child. The labour had lasted thirty-six hours. The head had been at the outlet of the pelvis for ten, during which time the pains had been strong and regular. Venesection had been employed without much effect. I thought it safer to extract the head than to allow it to remain longer in the pelvis, but the pressure of the blades must have been the immediate cause of its death, for it was alive a short time before the blades were introduced.

(CASE 55.) At half-past seven A.M., on the 18th of August, 1842, I saw a case of protracted labour with Mr. Beale. The lady was thirty years of age, and had been in labour with her first child upwards of twenty-four hours; the pains had been strong and regular for sixteen. The head, surrounded by the os uteri, was pressed considerably into the pelvis, but an ear could not be felt. An enema was administered, and the case was left to the natural efforts till five in the afternoon, when the os uteri was fully dilated, but the head had

advanced so little, that an ear was still felt with difficulty. A great tumour had formed under the scalp. The pains had diminished so much in force, that it was obvious the head would never pass without assistance. The child was extracted alive with the forceps, but the perineum was slightly torn as it passed, which was unusually large.

(CASE 56.) On the 1st Feb. 1843, Mr. Russel, of Broad-street, requested me to see a lady, forty years of age, who had been upwards of twenty-four hours in labour with her second child. The first stage of labour had been completed twelve hours, and the head during the whole of this time had been so low in the pelvis, that the right ear could be felt behind the symphysis pubis. The pains were strong and regular; the parts at the outlet of the pelvis were not rigid, and yet the head did not pass—when the pains went off, it immediately receded. The cord, pulsating, was felt firmly twisted round the neck, and this circumstance having been ascertained, and considered the cause of the protraction, along with unusual smallness of the pelvis, it was determined to leave the case to nature while the circulation in the vessels of the cord went on without interruption. After six or eight hours, the head remaining stationary, and the pulsation of the umbilical arteries becoming more and more languid, we resolved to deliver with the short forceps. I had no difficulty in applying the blades and extracting the head without injury. The respiration of the child was soon completely established, and it is now alive, and the mother recovered in the most favourable manner. Eight years before, this patient, after being left long in labour with her first child, was delivered with the forceps. The child was extracted alive, but its head was severely injured, and it died soon after.

(CASE 57.) On the 7th May, 1843, Dr. Andrews requested me to see a private patient of his, thirty-five years of age, who had been upwards of twenty-four hours in labour with her first child. The pains had almost entirely gone off; the pulse was rapid and feeble, and all the common effects of exhaustion were so strikingly observed, that we considered it impossible for the child ever to be expelled by the natural efforts. The meconium was passing in large quantities, and the fetal heart could not be heard after the most careful auscultation of the whole region of the uterus. There was every reason to believe that the child was dead, and we were strongly tempted to have immediate recourse to the perforator and

crotchet. As the head was, however, sufficiently low in the pelvis to admit of the safe application of the short forceps, we resolved to make a cautious trial of this instrument, before opening the head. The blades were applied and locked with ease, but great and long-continued force was required to extract the head. The funis and heart continued to pulsate vigorously for a considerable period, but by no means could we succeed in making the child breathe. Had we trusted in this case to auscultation alone, it is obvious that a great error would have been committed. It is not, therefore, an infallible test of the child being alive or dead, and ought not, independent of other circumstances, to regulate our practice.

(CASE 58.) On the 20th June, 1843, Mr. Waters, of Bedfordbury, called me to a patient, æt. 33, residing at 47, Marshall-street, who had been many hours in labour, and was very much exhausted. The forehead was to the front of the pelvis, and a hand was felt along with the head. The parts at the outlet of the pelvis were not rigid, and the finger could be passed readily around the head. There was evidently no disproportion between the head and pelvis, and yet, from a cause which was not ascertained, the uterus had no power to expel the child. I applied the forceps when it became evident that the delivery would not be completed by the natural efforts. The perineum being greatly distended, and in danger of laceration in whatever manner the handles of the instrument were directed, the blades were taken off, and the head soon passed safely without any artificial assistance. The child was alive, and had sustained no injury. It was immediately ascertained that there was another child in the uterus, and without loss of time I passed up the hand, brought down the feet, and extracted it alive with great ease. The binder, pressure, and all other means were employed to secure the perfect contraction of the uterus, and in a short time the two placenta were expelled without hemorrhage. In this case the first child was indebted for its life to the forceps; the second, to the prompt performance of the operation of turning.

(CASE 59.) On the 6th of July, 1843, Mr. Acret, of Torrington-square, requested me to see a lady, of feeble constitution, thirty-eight years of age, who had been in labour with her first child from three o'clock on the morning of Wednesday till the afternoon of the following day. The liquor

amnii had escaped at the commencement of labour, and the first stage occupied about twenty-four hours. The forehead was then found to be directed towards the symphysis pubis, and the head was so low that an ear could be felt. The pains being strong and regular, and there being no want of space at the outlet of the pelvis, we waited several hours in the hope that the head would be expelled without artificial assistance. All attempts to turn the forehead round to either side of the pelvis were found to have no effect, and complete exhaustion rapidly took place. The blades of the forceps were easily applied, but they were also in this case removed as the head was passing into the world, to prevent laceration of the perineum. The child was alive, and no injury was sustained either by the mother or infant.

(CASE 60.) At seven A.M., on the 13th July, 1843, Mr. Hutchinson, of Guildford-street, requested me to see a lady, under his care, who had been twenty-seven hours in her first labour, and she had suffered severely in the latter months of pregnancy, from the great size and distention of the abdomen. The legs and thighs were swollen and œdematous. The labour commenced before the full period of pregnancy had been completed, and a great quantity of liquor amnii escaped before there was any pain, or dilatation of the os uteri. The first stage of labour was soon completed, and the head of the child came down into the pelvis, but remained stationary there for many hours, nearly all the day. The umbilical cord was felt round the neck pulsating strongly; the finger could be easily passed around the head, and there was no want of space in the pelvis. As the patient was not exhausted, we resolved to leave the case for a time to the natural efforts. At eleven A.M. no progress whatever—head in the same situation—and cord still pulsating. At midnight, being no advance, and the patient becoming faint and exhausted—it being perfectly obvious that the head would never be expelled by the natural efforts, we resolved to deliver with the forceps. The blades were applied with great ease in the usual manner, over the sides of the head, and the child was quickly extracted, alive and uninjured. It was soon ascertained that there was a second child, and that the head presented. It became a question whether the operation of turning should be immediately performed, or the expulsion of this child should be left to nature. The last plan was considered most advisable, and to promote uterine

contractions the binder was firmly applied, stimulants were given, and the second bag of membranes ruptured. The head advanced, and we soon found the umbilical cord likewise surrounding the neck of this child, and impeding its progress through the outlet of the pelvis. In two hours it was expelled alive by the natural efforts, and we were relieved from the apprehension that it would become necessary to deliver this child also with the forceps. Both the children are now alive, and their mother recovered perfectly.

(CASE 61.) On the 10th October, 1843, I was called to a case of very protracted labour, in which the head of the child was firmly impacted in the brim of the pelvis, and an ear could not be felt. An unsuccessful attempt had been made two hours before to deliver with the forceps. The uterine contractions were so violent and incessant, that immediate relief seemed necessary, and as it appeared impossible for the head to be pressed through the brim, recourse was had to the perforator and crotchet. I was informed that this patient had been delivered with the forceps nine years before, and that the head of the child had been so much injured that it died in a few hours after. Her recovery was slow and imperfect. She afterwards, however, became pregnant, and was delivered of a small premature child, without any artificial assistance.

(CASE 62.) On Tuesday, the 21st November, 1843, at four A.M., Mr. Fincham, of Spring Gardens, requested me to see a patient under his care, who had been long in labour. The pains commenced on Sunday, the 19th, and continued the whole of Monday. At eleven at night the greater part of the head was still above the brim of the pelvis, and the pains were continuing regular, and as she was not exhausted, it was not considered requisite to interfere. At four o'clock the following morning the head was swollen. It had descended so low, that an ear could be felt, and there were symptoms, local and constitutional, which made it unsafe to leave the labour longer to nature. The head being much compressed, I experienced some difficulty in getting the blades of the forceps over the sides of the head and locking them, and more than usual force and care were required to extract it without injury. The child was, however, alive, and escaped with its mother unhurt. I was informed by Mr. Fincham, that this patient, three years before, after a

very protracted labour, had been delivered with the perforator and crotchet. The head of the child, after the labour had continued fifty hours, had not come sufficiently low to admit of the application of the forceps. She recovered, and about two years ago was delivered of a premature living child, without any artificial assistance.

(CASE 63.) On the 9th January, 1844, Mr. Fitzpatrick, of Lisson-street, called me to see a patient with very protracted labour. The head of the child had remained many hours in the cavity of the pelvis without advancing, and the pains having gradually declined in force, and the strength of the patient being exhausted, it was evident that the labour would never be completed without artificial assistance. The head being sufficiently low for the forceps, the blades were easily applied, and the head extracted. The child was alive and uninjured. Its unusual size appeared to have been the only cause of the difficulty experienced on this occasion, for the patient had repeatedly been delivered before at the full period, without help.

(CASE 64.) On the 8th August, 1844, at half-past five A.M., I received the following note from P. Bossey, Esq., Woolwich —“ I beg the favour of your immediate attendance on the case of——, whose delivery is rendered imperative by the occurrence of dangerous symptoms, arising from want of room at the brim of the pelvis. The ear can be felt, and the forceps are admissible.” The labour had continued forty-eight hours. The patient had been delirious through the night. The pulse was excessively quick, and the breathing rapid. When I saw the patient, her condition was such as to render immediate delivery absolutely necessary. The greater part of the head had passed into the pelvis. An ear was felt close to the right ramus of the pubis. It was a legitimate forceps case. Dr. Bossey applied the blades over the sides of the head, and extracted it with the greatest dexterity, and without the employment of much force. The child was alive, and the soft parts of the mother sustained no injury, but for some time after, in consequence of the pressure of the head during the protracted labour, the catheter was required. The power of the bladder, however, gradually returned, and I believe the recovery of the patient was perfect. The child did not long survive.

(CASE 65.) On the 11th December, 1844, I saw a case of

puerperal convulsions, with Mr. Bryant, of the Edgeware-road. The patient was thirty years of age; it was the first labour, and the pains had commenced only twelve hours before. She was an extremely delicate, nervous person, and the pulse was so rapid and feeble, and her countenance so pale, that Mr. B. considered it unsafe to employ venesection. Eight leeches had been applied to the temples before I saw her, when she was completely insensible, and had suffered from four violent fits of convulsions at short intervals. The head of the child being sufficiently low in the pelvis for the employment of the forceps, I passed up the blades, and readily locked them, but on making the necessary traction, she became so restless and so completely unmanageable, that I was glad to remove the instrument, which there was some difficulty in doing. After she had been delivered by lessening the head, and before the placenta was removed, a long and violent fit took place. No fit occurred after the placenta was taken away, and she appeared for some time to recover in the most favourable manner, till symptoms of uterine inflammation supervened, and she did not regain her health for several months.

(CASE 66.) At two A.M., on 'Thursday, the 20th December, 1844, I was called to a patient who had been in labour since the preceding Saturday. She was extremely distorted, both in the pelvis and extremities, by rickets, and had been delivered by me about twelve months before, by the perforator and crotchet. She had been four times pregnant, and all the children had been still-born. On this occasion a practitioner was in attendance, whom the patient had studiously kept in ignorance of these circumstances, and who, after waiting till his patience was completely exhausted, had attempted to deliver her with the long forceps. I saw upon the table a great variety of long and short forceps, which I was candidly informed had been all tried in succession, without any good effect. The head had not entered the brim of the pelvis; it was much swollen; the os uteri also was half dilated. She was completely worn out. I opened and extracted the head with considerable difficulty, and she soon recovered. This patient had been advised to have premature labour induced, but she would not consent, and hoped to get rid of the difficulty by changing her surgeon.

(CASE 67.) A few nights after the occurrence of the preceding case, I was called by Mr. Carruthers, of the York

Road Lambeth, to see a patient who had been delivered several days before, and was supposed to be dying of puerperal peritonitis. The symptoms were not, however, those usually observed in any of the varieties of uterine inflammation I had ever observed, and on inquiring into the history of the case, I was informed that the forceps had been used during the labour by a very young and inexperienced practitioner, and that great extracting force had been employed by him. The symptoms arose, I found, from extensive laceration of the perineum and vagina. It was stated that the labour had not continued upwards of two hours, when the medical attendant informed an intelligent female friend of the patient who was present that the face of the child presented, and that it would be necessary to deliver with instruments. He went home, and brought the forceps, which he applied, and after "dragging away for a long time with great force, and the head would not come," he removed the instrument, and left the case to nature. The child was born alive three or four hours after, without assistance.

(CASE 68.) On the 9th October, 1844, Mr. Balderson requested me to see a patient who had been upwards of twenty-four hours in labour with her first child. The head of the child was sufficiently low for the application of the forceps, but as it did not appear to be suffering from the pressure, and there were no local or constitutional symptoms present to render artificial delivery immediately necessary, the case was left to nature until nearly forty-eight hours had elapsed from the commencement of labour. During twelve of these forty-eight hours, the pains went off entirely, although the patient was not exhausted. When it appeared certain that the head would not be expelled by the natural efforts, I applied the forceps, and extracted it with great ease, but the child was dead. The patient seemed to recover favourably for a week or ten days, when slight hemorrhage took place from the uterus, and the constitutional symptoms of uterine phlebitis appeared, and she died on the 16th November, 1844. It would have been more satisfactory in this case, and more accordant with the established principles of midwifery, if the delivery had been effected with the forceps earlier.

(CASE 69.) A woman, twenty-nine years of age, who had been delivered four years before of a premature child, being at the full period of her second pregnancy, labour commenced with rupture of the membranes, on Sunday morning, the

27th April, 1845. There was then no dilatation of the os uteri, and the pains were feeble during the whole of that day and night. On Monday, the dilatation went on so slowly that the os uteri was not open to a greater extent than a half-crown, and the pains were still feeble and irregular. On the morning of Tuesday, the 29th, I was called to see this patient, who was considered to be in "a very bad state," and was informed that an attempt had been made to deliver her with the forceps, but that it had failed in consequence of the head being so high up and so moveable. The countenance was sunk, the pulse 140, the breathing excessively rapid, and she was in severe and constant pain. The tongue very loaded, but no vomiting. There was slight hemorrhage; the os uteri was not more than half dilated, and the head scarcely to be reached with the finger, and receding when touched. A loop of the cord without pulsation was felt along with the head. The symptoms at once led to a suspicion that the uterus was ruptured, and on making a more careful examination, I ascertained that there was an immense rent in the lower part of it behind, and that the intestines were protruding through it. Immediate delivery was necessary, but I found the head could not be perforated, from its moving away when the point of the instrument was pressed against it. I therefore passed the hand into the uterus, and through the rent among the intestines, to grasp the feet, which had escaped, and brought them down into the vagina and delivered the child, but with much difficulty, in consequence of the head becoming fixed in the brim of the pelvis. It was found necessary to perforate the back part of the head, to evacuate a portion of the brain, and to employ the crotchet in drawing the head into the cavity of the pelvis. The patient died a few minutes after the delivery was accomplished.

(CASE 70.) On the 15th July, 1845, I saw a case of labour which had lasted fifty hours. It was the first child, and the os uteri being rigid, many hours had elapsed before its dilatation was accomplished. Complete exhaustion having taken place, I applied the blades of the forceps and brought the head partially through the outlet of the vagina. It being obvious, after great caution and delay in extracting the head, from the extraordinary rigidity of the perineum, that extensive laceration would be the result of further efforts to overcome the resistance, and believing the child to have

died from the long-continued pressure it had sustained, the blades of the forceps were removed, and the delivery safely completed with the perforator and crotchet. The care required, after the head had been lessened, to extract it without injuring the perineum, satisfied the minds of the other two experienced practitioners who were present, that the delivery could not possibly have been safely accomplished with the forceps.

(CASE 71.) On the 3d of September, 1845, at nine P.M., Mr. Jones, of Soho-square, requested me to see a patient who had been in labour about twenty-four hours. First child. There was no fever, nor tenderness of the abdomen, nor any evidence of the soft parts within the pelvis suffering from pressure. The head presented, and had passed so far through the brim that an ear could with difficulty be felt behind the symphysis pubis. As the pains were strong and regular, we thought it advisable to leave the case for some time to nature. At two A.M. the head, much swollen, had descended into the pelvis, and was pressing during each pain against the perineum, and slightly through the external parts. At nine, the pains became so feeble, and there was so much exhaustion, and the head was so much swollen, that we thought it extremely probable the child would not be expelled alive by the natural efforts, and that we were fully justified in having recourse to artificial means. I applied the blades of the short straight forceps, covered with leather in the usual manner, over the sides of the head, and without much difficulty in a short time extracted the head. The child was alive, had sustained no injury, and the mother recovered most favourably.

(CASE 72.) On the 5th September, 1845, I was called in the middle of the night to deliver a lady with the forceps, who had been only six hours in labour. The head was in the pelvis, and fairly within reach of the instrument, and it might have been employed with safety, but I considered it unjustifiable to do so, as there were no symptoms present requiring immediate delivery. From some cause acting on the nervous system of the uterus through the brain,—probably the absence of her ordinary medical attendant in her former labours, and the presence of a stranger,—the pains had suddenly and wholly ceased, without any symptoms of general exhaustion. On assuring the patient that she was safe, and under the care of one in whom she might repose

the most perfect confidence, after a few hours the pains returned, and she was safely delivered by the natural efforts.

(CASE 73.) On the 3d October, 1845, Mr. Kennedy, of Tavistock-square, requested me to see a patient, æt. twenty-five, who had been upwards of forty-six hours in her first labour. The liquor amnii escaped before the pains commenced; the head had cleared the os uteri, but not the brim of the pelvis, in which it was firmly jammed. With great difficulty an ear could be felt above the symphysis pubis. It was a matter of serious consideration whether an attempt should be made to deliver with the forceps; and we came to the conclusion, after weighing all the circumstances of the case,—the duration of the labour, the constitutional powers, the condition of the soft parts, and the impacted state of the head,—that the attempt would be unsuccessful in preserving the life of the child, and would be attended with the greatest risk to the mother. We therefore decided, as delivery could not be delayed, to open and extract the head, and the great difficulty experienced in completing the delivery proved that the head of the child could not have been extracted without perforation. The patient recovered in the most favourable manner.

(CASE 74.) At four A.M., 28th November, 1845, I was called by Mr. Simpson, of Holborn, to a case in Thorney-street, Bloomsbury, of difficult labour, at the full period, from extensive cicatrices in the vagina. The patient had been delivered of her first child with the forceps four years before; sloughing of the vagina followed, and the passage had become almost completely closed up by a cicatrix of great firmness and extent. Five months after the occurrence of the second pregnancy, Mr. Liston was consulted, and made several notches, or incisions, in the edge of the cicatrix, with a bistoury. Labour had commenced twelve hours before I saw the case, when the membranes had just given way, and the head had begun to press upon the cicatrix, which formed a complete ring not far from the orifice of the vagina. When the head was forcibly driven against it during the pains, it became tense and hard, and was opened to the extent of an inch in diameter. At six o'clock in the morning, Mr. Liston saw the patient, and made three incisions, not very deep, through the edge of the contracted ring, one behind, one on the right, and the other on the left side. At eleven

A.M., the cicatrix was much dilated, becoming softer, and the head of the child descending. It appeared to me very probable that the head would in time pass, if the case were left to nature. At ten o'clock at night, complete exhaustion had taken place, and the pains had almost entirely ceased. The pulse was rapid and feeble; tongue furred; head disturbed. The contracted ring had undergone no change for ten hours, during the greater part of which the head had been forcibly pressed against it by the contraction of the uterus. It being obvious to Mr. Simpson and myself that the time for artificial delivery had arrived, that further delay might have been attended with fatal results, and that the blades of the forceps could not be passed over the head through the contracted part without great violence and laceration, we resolved to employ the perforator and crotchet. After the head had been diminished, long-continued efforts with the crotchet were required before the head could be drawn through the parts. This was, however, at last safely effected, and no bad symptoms followed the delivery.

(CASE 75.) On the 21st July, 1846, I saw a lady whose perineum and sphincter ani had been extensively lacerated about two months before with the forceps, during her first labour, which had not been very protracted. The accoucheur, though possessed of great integrity and experience, and a sound judgment, had in this case unadvisedly employed the forceps without a consultation, and before the husband and her relative were convinced of the necessity of interference. The nature of the accident had not been discovered for sixteen days. I found the perineum wholly destroyed, and a great part of the sphincter ani; the parts were looking healthy, and the cicatrization proceeding favourably. The contents of the rectum could not be retained, but after several months this power was partially regained—and the general health in some degree restored. The child was born dead. A few days before I was consulted respecting this case, I saw another, in which laceration of the perineum to a less extent had taken place, where no instrument had been employed. It was also a first child, and the head was remarkably large. During the pains, the patient was extremely restless, so that the continued proper support of the perineum by the medical attendant could not be made. The accident was the consequence of no neglect of his, but of a want of fortitude in the patient. The sphincter was entire, and with attention to

cleanliness, keeping the knees together, and drawing off the urine night and morning for some weeks, the torn parts became united much more completely than could have been expected, and the functions of the rectum restored.

(CASE 76.) On the 5th April, 1847, I saw a case of protracted labour, with Mr. Pope, of Manchester-square. It was the first child; the presentation was natural, and there did not appear to exist any considerable disproportion between the head and pelvis. It being obvious, from the feeble and irregular uterine action, and the arrest of the head, that it would never be expelled by the natural efforts, the forceps was applied, and the head readily extracted. The child was dead. The mother sustained no injury.

(CASE 77.) On the 12th April, 1847, I saw, in consultation, a case of puerperal convulsions, where the head was in the pelvis, and the forceps might have been applied with safety, but for the insensibility, restlessness, and constant agitation of the patient. Delivery was accomplished by the perforator and crotchet. Consciousness returned, and the fits ceased, but death took place some days after, apparently from an affection of the brain. On the 3d May, I saw another case of puerperal convulsions, in Millbank prison, in which the fits continued with great severity after the employment of depletion and other means. Mr. Davey applied the forceps without difficulty, but a violent fit occurred before the head could be extracted; and from the same causes as in the last patient, the forceps was obliged to be withdrawn, and the perforator and crotchet employed. The patient did well.

(CASE 78.) On the 5th July, 1847, I saw a lady, fifty years of age, who was suffering from malignant disease of the uterus. Upwards of twenty years before, she had been delivered of her first child with the forceps, after a very protracted labour. The child was dead; sloughing of the vagina followed, and the urine had ever afterwards partially continued to escape through a small opening between the bladder and vagina, close to the os uteri. An unsuccessful and injurious attempt was made, some months after, to close the fistulous opening, by the repeated application of the actual cautery.

(CASE 79.) On the 5th of August, I saw a lady, with Dr. Duffin, who had been many hours in labour with her first child. She appeared to be in great danger of becoming com-

pletely exhausted before the head of the child had passed into the cavity of the pelvis. We thought that it would then be necessary to lessen the head. The os uteri being imperfectly dilated, artificial dilatation was followed by the most marked effect; the head afterwards slowly descended through the brim, and came within reach of the forceps. The labour went on after this, from the morning till ten P.M., when exhaustion took place. The forceps was applied, and the child extracted alive without injury, but the blades of the forceps were required to be removed to prevent the destruction of the perineum. No case that I had ever seen required more caution and patience than this, and in none was the result more satisfactory.

(CASE 80.) On the 17th August, 1847, I saw a lady, under the care of Mr. Ballard, who had been in labour with her first child about forty hours. The first stage was soon completed, but the head passed slowly through the brim into the cavity of the pelvis, so as to be within reach of the forceps, where it remained about twelve hours, without advancing. As the pains continued regular, and there were no local or constitutional symptoms to render delivery requisite, we delayed till it became obvious, from exhaustion taking place, that the child would never be expelled by the natural efforts. The forceps was then applied, and the head was soon drawn forward, till the perineum was in danger of laceration. The blades were then removed, and in a short time the head was safely expelled by the natural efforts. These two cases bore a striking resemblance to each other, and furnished the most striking evidence in support of the utility and safety of the forceps, when properly employed.

SECOND REPORT.

DIFFICULT LABOURS FROM DISTORTION OF THE PELVIS, SWELLING OF THE SOFT PARTS, CONVULSIONS, HYDROCEPHALUS IN THE FŒTUS, AND OTHER CAUSES, IN WHICH DELIVERY WAS EFFECTED BY THE OPERATION OF CRANIOTOMY.

(CASE 1.) Mack, 86, Monmouth-street, æt. twenty-four, 28th July, 1824. First labour, sixty-seven hours. Pelvis and extremities distorted by rickets. Extraction with the crotchet tedious and difficult. Followed by slight uterine inflammation. Recovered.

(CASE 2.) Bryant, No. 10, Tottenham-place, 1st Aug., 1824. Duration of labour, forty-eight hours, after rupture of the membranes. Face presentation. Delivery followed by uterine hemorrhage. Recovered.

(CASE 3.) Manning, æt. twenty-two, No. 131, Drury-lane, 2d November, 1827. First labour; duration three days. Head and arm presenting. Many strong efforts made to turn during twenty-four hours by the accoucheur. Child dead. Head opened and drawn down with the arm. Followed by severe inflammation of the uterus. Recovered.

(CASE 4.) ———, æt. thirty, No. 2, Conway-street, 2d March, 1828. Third labour, forty hours. Membranes ruptured, and first stage completed in fifteen hours. Head long fixed in the brim. V. S. Enemata. Exhaustion. Extraction difficult. Recovered.

(CASE 5.) ———, St. James's Infirmary, Feb. 29th, 1828. First labour; duration thirty-six hours. Head many hours impacted in the brim. Vagina swollen and tender. Retention of urine. Pulse rapid and feeble. Great exhaustion. Delivery not difficult. Recovered.

(CASE 6.) ———, æt. 35, - Holles-street, Clare-market, 6th August, 1828. Duration of labour twenty-four hours. Enormous œdematous swelling of thighs and external parts. A large exomphalos. Head in the pelvis, and an ear felt. Attempts to deliver with the vectis and forceps failed in consequence of the swelling. Recovered. Had mania after a former delivery, and has a child maniacal.

(CASE 7.) Davis, æt. twenty, No. 9, Orange-street, Leicester-square, 27th March, 1829. First labour; seventy-two hours' duration. Os uteri rigid and partially dilated. Head compressed in the brim. Pulse rapid. Tongue loaded. Abdomen tense and painful. Retention of urine. Delirium; exhaustion. Perineum slightly lacerated in extracting the head. Great inflammation and sloughing. Died.

(CASE 8.) ———, æt. thirty, No. 6, Brewer's-court, 29th April, 1829. First labour. Liquor amnii discharged six days. Pains, after being strong and regular during twenty-four hours, ceased. Head fixed in the brim. Child dead. Bladder distended. Catheter cannot be passed. Patient recovered.

(CASE 9.) ———, æt. twenty-two, No. 7, Little Denmark-street, 14th September, 1829. First stage very protracted. Vagina forcibly dilated with the hand of the midwife. Head of the child has passed into the pelvis. Labia swollen to the size of a child's head, so that neither the vectis nor forceps can be used. Gangrene of vagina and external parts. Died.

(CASE 10.) ———, æt. thirty, St. Marylebone Infirmary, 13th September, 1832. First labour; thirty-six hours' duration. Great distortion of pelvis. Patient recovered.

(CASE 11.) Brookes-mews. First labour; forty-eight hours' duration. No progress for eighteen hours. Os uteri imperfectly dilated. Head fixed in the brim. An unsuccessful attempt to apply the forceps. Great force required to extract. The pelvis was small. Recovered.

(CASE 12.) Saint Marylebone Infirmary, 5th July, 1833. First labour. Great protraction. No progress for twenty-four hours. Head above the brim. Orifice partially dilated. Rapid pulse, exhaustion, incoherence. Patient recovered.

(CASE 13.) Æt. thirty. Paddington, 11th November, 1833. First labour; duration forty-six hours. Small pelvis. V. S. Ergot. Membranes artificially ruptured. Os uteri rigid. Great swelling of vagina. Retention of urine. Cessation of pains. Child very large. Recovered.

(CASE 14.) Æt. thirty. Clarence-gardens, 31st Dec., 1833. First labour; continued Sunday, Monday, and Tuesday. Pains gone. Great restlessness and incoherence, and great swelling of the soft parts: forceps unsuccessful. Cord round the neck tightly. A second child. Recovered.

(CASE 15.) Æt. thirty-five. Paddington. Violent puerperal convulsions. Not relieved by V. S. No fits after delivery. Recovered.

(CASE 16.) Gresse-street, with Mr. Balderson, 8th May, 1837. Funis prolapsed, and without pulsation. Edge of placenta felt at the os uteri. Hemorrhage, and no pain for many hours. Os uteri half dilated. Perforation twenty-four hours after labour commenced. Recovered.

(CASE 17.) St. Ann's Workhouse, with Mr. Jones, 15th August, 1837. Puerperal convulsions. No relief from copious V. S. Fits ceased soon after delivery. Recovered.

(CASE 18.) Castle-street, Leicester-square, with Mr. Roach. 1833. Second labour. Uterus ruptured spontaneously after labour had continued twelve or fifteen hours. Head receded. Vomiting. Slight hemorrhage. Cessation of pain. Hurried respiration. Sunk countenance. Pressure made on the fundus uteri during perforation. Head extracted without much difficulty. Died within twenty-four hours, and a great rent found in the uterus.

(CASE 19.) Borough of Southwark, with the late Mr. Millard, 1st July, 1833. Distortion of pelvis. Head perforated and extracted, after great protraction, by Mr. Millard. Shoulders jammed in the brim, and head nearly separated from the trunk. I passed up the crotchet, and fixed it in the thorax, and delivered. A quantity of fetid gas afterwards escaped from the uterus. Recovered.

(CASE 20.) Æt. thirty-two, 9 Duke's-row, St. Pancras, with Mr. Kennedy, 9th March, 1838. First labour; liquor amnii discharged six days. Head half through the brim for thirty hours. Os uteri partially dilated, and vagina swollen and tender. Great thirst, vomiting, exhaustion. Retained placenta, and hemorrhage. Recovered.

(CASE 21.) Mrs. —, æt. twenty, 3d April, 1828. In labour with her first child from Monday till Thursday night, under the care of a midwife. The navel string without pulsation prolapsed. Brim and outlet of pelvis distorted. Head of the child has not entered the cavity of the pelvis. Os uteri only partially dilated. Vagina swollen and tender.

Pains have been gradually diminishing in strength and frequency. Dr. H. Ley saw her with me, and approved of immediate delivery by craniotomy. The bones of the cranium were all torn away with the crotchet, before I succeeded in drawing the base of the skull through the brim of the pelvis. The point of the crotchet being fixed on the outside of the head near the left angle of the lower jaw, its extraction was at last accomplished. Great force was afterwards required to drag the shoulders into the cavity of the pelvis. Though the parts within the pelvis must have been severely contused during the operation, no bad symptoms followed, and this patient has again been delivered at the full period by craniotomy.

(CASE 22.) On the 18th Nov., 1828, I was called to Mrs. Freer, 61, St. John-street, Smithfield, with protracted labour. The membranes had been ruptured two days before, and the labour-pains had been regular ever since that occurred. The os uteri was about half dilated, and the head had scarcely entered the brim of the pelvis. It was evident that the head could not pass without being lessened in size. The operation of craniotomy was difficult, and there was an attack of uterine inflammation afterwards experienced, from which she recovered slowly. The late Mr. Baker assisted in extracting the head. This patient had a lateral curvature of the spine, from an early period of life, and had been delivered by craniotomy five years before.

(CASE 23.) Mrs. Freeman, 17, Duke's-court, Drury-lane, 19th Sept., 1828. Has had several living children. The last labour was so difficult, that the head of the child was opened. She has now been two days and two nights in labour. Membranes ruptured thirty-six hours ago. Head firmly compressed between the sacrum and pubes; a great swelling upon the scalp, and has not advanced for twenty-four hours. Vagina swollen and tender. Pains becoming weaker. No attempt to deliver with the forceps or vectis. Great force was required to extract the head after being opened. Right parietal bone of the child depressed and fractured.

(CASE 24.) On the 27th of Dec., 1829, I was called to a woman in labour, with distortion of the pelvis, residing in Golden-ball-court. It had lasted upwards of forty-eight hours. The head was wedged in the brim, and from her exhausted state it was evident artificial delivery was imme-

diately required. She recovered favourably after perforation. It was her second child, and the first had likewise been delivered by craniotomy.

(CASE 25.) On the 13th Sept., 1832, I was called to a patient in the lying-in ward of the St. Marylebone Infirmary, who had been thirty-six hours in labour with her first child. There was great distortion of the pelvis from rickets in infancy. The perineum and vagina were rigid; the os uteri not more than half dilated, and the whole head of the child above the brim of the pelvis. The pulse was rapid, face flushed, and abdomen tender. I first dilated the external parts gently, then passed forward the fore and middle fingers of the left hand to the head, and along these slid up the perforator, and opened it, and then destroyed the brain. I found it impossible to pass up the craniotomy forceps, and fix it upon the head, and extraction was slowly effected with the crotchet. It was necessary, while operating with the crotchet, to pass nearly the whole of the left hand into the vagina, that the forefinger might reach sufficiently high to guard the point of the instrument, which was passed through the opening in the skull. The operation lasted two hours, and the bones of the skull were all torn to pieces, before the head could be extracted. Dr. James Jackson, of Boston, United States, whose premature death many have lamented, was present, and after the delivery was accomplished, he informed me, that distortion of the pelvis was rare in America, and that his father had been thirty years in extensive practice at Boston, and had never met with a case of difficult parturition requiring the operation of craniotomy.

(CASE 26.) On the 15th March, 1832, I saw Mrs. Kirby, æt. twenty-nine, residing in Gee's-court, Oxford-street, who had been more than forty-eight hours in labour with her first child. She was extremely exhausted, and the pains, which had long been regular and strong, had nearly gone off. The outlet and brim of the pelvis were both considerably distorted, and as the greater part of the head was still above the brim of the pelvis, and the soft parts were swollen and tender, delivery was immediately accomplished by craniotomy. The difficulty experienced in extracting the head with the crotchet after it was opened, proved that delivery could not have been completed by any other method, and the child, if alive, could not have been preserved. The patient again became pregnant, and I proposed to induce premature labour

on the 21st of July, 1835, when she was seven months and a half pregnant; but she would not consent to this. Labour came on spontaneously, at the commencement of the ninth month of pregnancy: a foot presented, and the child was extracted dead, without craniotomy.

(CASE 27.) Mrs. Kirby came into the St. Marylebone Infirmary, May 23d, 1834, in labour at the full period. I was called to see her early in the morning, and found the os uteri fully dilated, the membranes ruptured, and the head firmly fixed in the brim of the pelvis. The pains were frequent, and very strong. At eleven P.M., six hours after, the pains continued with increased violence, and the head was still more firmly jammed in the pelvis. A large swelling had formed under the scalp, and the meconium was escaping from the vagina. Two strong fits of convulsion had been experienced, for which a copious venesection had been employed. I found her completely insensible, with dilated pupils and constant convulsive movements of the muscles of the face. The pains continued with such violence, and recurred at such short intervals, that I dreaded rupture of the uterus. At three P.M., other two strong convulsion fits had occurred, and the head having made no progress, I determined to deliver by craniotomy. After the head had been perforated and drawn into the cavity of the pelvis with the crotchet, it was easily extracted with the craniotomy forceps. The small size of the pelvis, the impossibility of applying the forceps to the head, the imminent risk of rupture of the uterus, with the result of the former labour, were the circumstances which made me determine to open the head. The induction of premature labour was again recommended to this patient, but without success, and she again became pregnant, and went to the full period.

(CASE 28.) Mrs. Kirby, the same patient, came again into the lying-in ward of the St. Marylebone Infirmary, on the 3d December, 1836. Labour had commenced early the preceding day, the liquor amnii escaped soon after, and the pains had continued strong and regular during the whole night. On the morning of the 8th, I received a note from Mr. Sandford, requesting my immediate attendance. The head of the child had long been firmly fixed in the brim of the pelvis; the ear could not be felt; the vagina was hot, tender, and swollen. The countenance was flushed, and she was occasionally delirious. The abdomen tense. She expressed her

conviction, when free from pain, "that she would soon burst if not delivered." I perforated the head without delay, and readily extracted it with the craniotomy forceps. The placenta was expelled soon after, and she recovered.

(CASE 29.) Mrs. Crowther, æt. forty-five, December 6th, 1830; No. 9, Tavistock-mews, Little Coram-street. Has had nine children. All her labours have been difficult, and the two last so much so, that artificial assistance was required, and the children were still-born. Labour commenced on the 3d inst., and the membranes were soon after ruptured. The pains were continuing feeble and irregular during the 4th, and the labour having made but little progress, thirty-five drops of laudanum were given by the midwife in attendance. The pains entirely ceased until the morning of the 5th, when they returned, but feebly and irregularly. At ten P.M. two doses of the ergot of rye were given, and soon after, several strong forcing pains were experienced. The movements of the infant were not felt after this, and no uterine contraction has taken place to this hour, eleven A.M., Monday, 6th December, when I first saw her. The discharge from the parts has become offensive; bladder filled with urine. The vagina is swollen and tender. The head, greatly swelled and compressed, is firmly fixed in the brim of the pelvis, and the finger cannot be passed around it without occasioning great pain. The ear could not be felt, the greater portion of the head being still above the brim. After the head had been opened, two hours elapsed before I could extract it with the crotchet. 7th December. A bad night. Retention of urine. Great swelling and tenderness of the parts. Pulse rapid, tongue loaded, headache, rigors. Sloughing of the vagina took place, and on the 14th a fistulous communication had been formed between it and the bladder. This unfortunate woman was soon after deserted by her husband, and has led a life of great indigence and misery ever since.

(CASE 30.) 18th August, 1829. A middle-aged woman, who had suffered severely in former deliveries, being at the full period, was seized with the pains of labour yesterday morning at one o'clock. Last night the head of the child had begun to enter the brim of the pelvis, the os uteri being thin, soft, and considerably dilated. Labour-pains continued strong and regular during the whole night. At seven o'clock this morning the pains had entirely ceased; there was an offensive yellowish coloured fluid discharged from the vagina;

the pulse was rapid, and symptoms of exhaustion had appeared. The child had not been felt to move for two days, and the meconium was passing freely. I opened the head, and easily extracted it. A quantity of a peculiarly fetid gas and offensive fluid, like coffee and milk, escaped after the delivery of the child. The placenta was soon after expelled. Sloughing of the vagina took place in this case, and a small fistulous opening was formed between the bladder and vagina. In this and the preceding case a great error was committed in not delivering earlier.

(CASE 31.) A dwarf from the Mauritius, Santiago de los Santos, married an Englishwoman at Birmingham, whose height was three feet and three inches. She became pregnant, went to the full period, and was in labour at Chelsea on the 14th of April, 1835, under the care of Mr. Bowden. Dr. H. Davies was consulted, and finding the pelvis greatly distorted, he opened the head of the fœtus on the afternoon of the 15th of April, and removed with the crotchet a part of the cranium. At nine P.M. we proceeded together to complete the delivery with the crotchet, the outlet and brim of the pelvis being so contracted that all the varieties of craniotomy forceps were perfectly useless, as they could not be applied. The operation lasted nearly five hours, and the head of the fœtus could not be drawn through the brim of the pelvis, until the bones of the base of the skull were all torn to pieces with the crotchet; the point of which was generally passed up on the outside of the head. An arm was next drawn down, and the thorax torn open and all the viscera extracted. So great was the degree of distortion, that the pelvis of the child could not be drawn through the brim of the mother's pelvis till after long-continued efforts with the crotchet. We were both thoroughly exhausted before the delivery was accomplished, and it seemed at first impossible by any means to extract the child without producing fatal contusion or laceration of the uterus and vagina. On the 12th of May, the patient was walking about, and perfectly well. From this and similar cases, I am convinced that the crotchet is the only instrument that can be used effectively to extract the head after perforation, where the pelvis is greatly distorted. The undilated state of the os uteri, and the contracted brim and outlet, render it impossible to introduce the blades of the craniotomy forceps, to grasp the head, till it has been drawn by the crotchet into the cavity of the

pelvis. Then it is possible to employ the craniotomy forceps with great advantage, and to draw the head through the outlet of the pelvis with far less risk to the mother than if the crotchet alone were employed, and the perineum supported by an assistant.

(CASE 32.) On the 8th July, 1835, Mr. White, Lamb's-conduit-street, called me to deliver a woman *æt.* twenty-six, distorted by rickets in infancy, who had been in labour with her first child nearly sixty hours. The *os uteri* was thin and dilatable, but not fully dilated. The head presented, and had not entered the brim. The discharge from the uterus was yellow and fetid, and the movements of the child had not been felt for three weeks. I opened the head at one o'clock, but four hours elapsed before the delivery could be completed. After all the bones of the skull had been torn to pieces with the crotchet in extracting, I passed the crotchet up between the head and the uterus, to fix its point on the face or in one of the orbits. Unfortunately the point of the instrument came in contact with an arm, instead of the outside of the head, and the slightest force brought the arm into the vagina, and converted the case into one of arm-presentation, the head having immediately gone up beyond the reach of the crotchet. I passed the hand into the uterus to bring down the feet, but the utmost difficulty was experienced in accomplishing the operation of turning, from the shoulder and trunk of the child occupying the brim of the pelvis. She recovered, after an attack of uterine inflammation. This is the only case in which any mischief resulted from passing the crotchet on the outside of the head, as recommended by Smellie: and with a little more caution, I feel convinced that the accident might have been altogether prevented.

(CASE 33.) March, 1831, Dr. Duffin requested me to see a case of protracted labour, at 46, Old Compton-street. The labour had continued two days and nights. The pains, which had at first been strong and regular, had declined in strength as the head became more and more firmly impacted in the pelvis. There had been no progress for twelve hours. Pulse rapid; abdomen tense and tender on pressure. Great thirst, restlessness, and excessive despondency. Bloodletting and opiates had been employed. After the perforation, so much force was required to extract the head, as to make it certain that the head could never have been extracted without its size being reduced.

(CASE 34.) In the St. James's Infirmary, five A.M. 27th March, 1831, I saw a young woman who had been three days in labour. The vagina and external parts were much swollen, the discharge was offensive and mixed with meconium. The head of the child was so low in the pelvis, that an ear was felt, but it was so closely surrounded by the inflamed vagina, that the finger could not be passed up around it without causing great pain. Believing the child to be dead, and that it was impossible to apply the forceps without injury to the mother, I opened the head, and had some difficulty in extracting it. Retention of urine, and violent inflammation and sloughing of the parts followed. The bladder fortunately escaped. There is a firm, hard, extensive cicatrix left in the vagina.

(CASE 35.) At nine A.M., on the 6th March, 1831, I was called to a case of protracted labour, at No. 4, Jones's-court, Bainbridge-street. The patient had been three days in labour. The membranes had given way on the 4th, and the pains had been strong and regular during the whole of the 5th, and then declined. Ergot was given in repeated doses, and an attempt made to deliver with the forceps. I found the head at the external parts, but the tumefaction of the labia and vagina was such, that the blades of the forceps could not be introduced. The point of the finger could not be passed between the head and soft parts. It was the first child, and there was reason to believe that it was dead. Retention of urine and sloughing followed delivery, which might have been expected from the duration of the labour and the condition of the parts.

(CASE 36.) At five A.M. 17th February, 1831, called to a woman at No. 8, Mortimer-street, Tottenham-court-road. The pelvis was slightly distorted. The head of the child had been in the brim without advancing for many hours; it was swollen and compressed, and the vagina was hot and tumid. Pains nearly gone. Great excitement of the heart, and determination of blood to the head, with delirium. After V. S. an unsuccessful effort had been made to deliver with the vectis. She recovered well.

(CASE 37.) A case of very protracted labour occurred in the lying-in ward of St. Marylebone Infirmary, on the 5th of July, 1833. It was the first child. The os uteri was only partially dilated, and the back part of the head was above the brim. No ear felt. No progress for twenty-four hours,

when she became completely delirious, and the pulse very rapid and feeble. Consciousness returned next day, and she recovered.

(CASE 38.) In 1832, a case of very tedious labour occurred in Paddington-street, in which the bladder was allowed to become enormously distended. The head had been long wedged in the brim, and the soft parts, when I first saw her, were hot and swollen. The catheter could not be passed into the bladder till the volume of the head was lessened. A great quantity of fetid bloody urine was then drawn off. She subsequently died from inflammation of the bladder. It was proposed to give ergot in this case a short time before she was delivered.

(CASE 39.) On the 10th of May, 1835, I was called by Mr. Jones to a case of labour which had lasted fifty hours. First child. She was an indolent, corpulent person, who had been accustomed to drink large quantities of beer. The greater part of the head was above the brim. The head and soft parts were much swollen. Pains gone. The forceps could not be applied. Recovered.

(CASE 40.) On the 23d of June, 1835, St. James's Infirmary. A woman, after being above forty-eight hours in labour, had retention of urine, great swelling of the vagina and head of the child, which was firmly squeezed in the brim of the pelvis, and was not sufficiently advanced for the forceps. I passed the catheter, as I believed, into the bladder, but when there flowed through it a yellowish fetid fluid, with bubbles of air, I suspected that it had passed into the uterus, which was the case. On pressing back the head, a fetid gas escaped from the uterus. After drawing off the urine, and observing that the pains were very feeble, and that the head would never be expelled by the natural efforts, its bulk was diminished, and the extraction effected by the crotchet. Recovered.

(CASE 41.) Pimlico, 23d October, 1839. First labour; duration, three days and nights. Head firmly impacted in the brim, and swollen. Vagina tender and puffy. Retention of urine. Fever, tenderness of abdomen, great restlessness. Fetal heart not heard. Meconium passing. Sloughing and vesico-vaginal fistula. Recovered.

(CASE 42.) On the 13th January, 1840, a patient of the St. Marylebone Infirmary, with slight distortion of the pelvis, was in labour, and the face presented, and became jammed

in the brim. Violent uterine action was allowed to continue for hours, when the right labium became enormously distended with blood, and burst on the inner surface, and a great hemorrhage took place. The discharge of blood was checked by strong pressure with a sponge over the rent, while I opened and extracted the head.

(CASE 43.) Strand, with Mr. Radcliffe. 1st of February, 1840. First labour. First stage completed, and head far advanced into the pelvis, in twenty-four hours. Labour had continued for twenty-nine hours longer, without any advance of the head. Vagina swollen. Fever and exhaustion. Recovered.

(CASE 44.) Æt. twenty-six, Harrow-road, 14th of April, 1840. First labour. In labour three days. Os uteri rigid, and partially dilated. Head compressed in the brim. Vagina hot and swollen. Offensive discharge. Fever and exhaustion. Recovered.

(CASE 45.) Æt. thirty-eight. Eaton-square, with Mr. Jorden, four P.M. 11th of February, 1841. First labour; thirty-eight hours. Os uteri rigid, and not half dilated. Head has scarcely entered the brim. Pulse, one hundred, full and strong. V. S. $\frac{3}{4}$ xxx. starch and laudanum glyster. Four A.M. 12th of February. Os uteri more dilated, and head firmly pressed into the brim; bones overlapping, ear not felt. Great tumour of the scalp. Vagina swollen. Exhaustion. No room for the blades of the forceps. Mr. Jorden delivered, and the patient recovered most favourably.

(CASE 46.) Æt. twenty-three. No. 9, Villiers-street, with Mr. Radcliffe. Membranes ruptured at five P.M. 7th of July, 1840. Feeble irregular pains soon after, and during the night. The labour went on during the 8th, and at six A.M. of the 9th I found the head deep in the pelvis, but not pressing against the parts at the outlet; the ear not felt. Great swelling of the vagina and external parts, and pressure on the bladder. Meconium escaping, fetal heart not heard, and movements of fœtus not felt for three days. The head had not advanced for twenty-four hours. Exhaustion. Extraction tedious. Recovered favourably.

(CASE 47.) Æt. forty. Cochrane-terrace, with Mr. Crellyn, 31st of December, 1840. First labour; duration, forty hours. Orifice partially dilated, head entirely above the brim. Meconium passing; fetal heart not heard. Exhaustion. Great force required to extract. Recovered.—

On the 1st July, 1843, the same patient, whose pelvis is much distorted, was delivered by me by the same means. The meconium was passing. The head had not entered the brim of the pelvis.

(CASE 48.) The same patient, æt. forty-one. 13th of June, 1841. Second labour. Head and right arm presenting. Os uteri half dilated. Liquor amnii long discharged. Child dead. Preferred perforation to turning. Recovered.

(CASE 49.) On the 14th of September, 1841, I saw a lady, æt. twenty-two, who had been in labour from Saturday till Tuesday evening. The pains had gradually been diminishing in strength and frequency, the pulse was very rapid, and the brain much disturbed. The head of the fœtus, much swollen, was fixed in the brim of the pelvis, and had not advanced for many hours. The vagina swollen and tender, and the discharge extremely fetid. The catheter had been repeatedly introduced, and the urine drawn off had also become fetid. The pulsations of the fetal heart were not heard, and the symptoms were so urgent as to render immediate delivery by perforation necessary. She recovered without sloughing after the operation. In this case the impossibility of delivering with the forceps was obvious, and it would have been justifiable at an earlier period to have lessened the head, as her medical attendant thought necessary.

(CASE 50.) Dr. Corrie, of Finchley, called me, on the 30th of October, 1841, to a case of labour protracted beyond thirty hours. The head was strongly compressed in the brim, and the os uteri not fully dilated. Pulse one hundred and forty. Pains, after having been strong and regular, nearly gone, and she appeared completely worn out. The head required great force to extract it, after perforation. Recovered.

(CASE 51.) Called, by Mr. Boote, to a young woman with very protracted labour. The soft parts were immensely swollen, the discharge fetid, the head compressed in the brim. Retention of urine, and catheter could not be passed. Pulse rapid; tongue loaded; face flushed. Delirious. Two hours required to extract the head with the craniotomy forceps. Retention of urine and sloughing of the vagina followed. The bladder and rectum escaped. Recovered.

(CASE 52.) Æt. thirty-six, No. 4, Sanford-street, with Mr. ———, Tuesday, 12th of January, 1841. Labour commenced on Friday, the 8th. The pains were feeble during the Saturday. They became stronger on Sunday, and con-

tinued regular the whole of Sunday and Monday. At six A.M. Tuesday, 12th, the head was firmly wedged in the brim, and not one-half had passed. The bones squeezed over one another, as if by a heavy weight laid over the parietal bones. Os uteri widely dilated. Vagina swollen and tender. Bladder half filled, and the catheter will not pass. Offensive discharge from vagina with meconium. Movements of child not felt for many hours; fetal heart not heard. Tongue very loaded. Great difficulty in extracting the head. Perineum slightly lacerated. Retained placenta and slight hemorrhage. This patient died in a few days from uterine inflammation. She was left, I think, too long in labour.

(CASE 53.) With Mr. Johnson, Grosvenor-street West, saw a patient, æt. twenty-five, at No. 27, Market-street, Edgeware-road. Three A.M., April 1st, 1841. The head, hand, and funis without pulsation, presented, and had not passed the brim. After the labour had continued forty-eight hours, she began to wander. Extraction easy. Recovered favourably.

(CASE 54.) On Wednesday, the 12th April, 1843, the same patient had been seventy-two hours in labour, the liquor amnii had begun to escape on Monday night. The distention of the pelvis appeared to have increased. The head was entirely above the brim of the pelvis, and the os uteri not half dilated. Pulse 120, feeble. Occasional delirium. Mr. Johnson and I were of one opinion respecting the danger of further delay, and after perforation much greater force was required to extract the head than in the former labour. Recovered.

(CASE 55.) Æt. twenty-six. Knightsbridge, with Mr. R. Brown. First labour commenced at midnight, 3d May, 1841. Membranes ruptured two days before. At four A.M. on the 4th, orifice fully dilated, pains strong and regular. In the afternoon, bones of head overlapping and becoming impacted in the brim, ear not felt. In the evening the finger could be passed easily around it. Frequent hiccup. Feverish. Meconium passing. A peculiar nervous irritability. Pains regular; fetal heart heard. No symptom rendering delivery immediately necessary. A small bleeding at ten P.M. At five P.M., 5th of May; no progress, head jammed in the brim, fetal heart not heard. Rapid pulse; great restlessness, exhaustion, and delirium; so much force required to extract the head, that it was obvious it never

could have been delivered with the forceps, or expelled by the natural efforts. This patient recovered without a bad symptom; but it would be better practice had she been delivered earlier, and she would have been so, had it not been certainly known that the child was alive on the morning of the 5th. In the hope of saving the child, the mother's life was exposed to danger.

(CASE 56.) Eight P.M., 5th of September, 1841, Mr. Skegg requested me to see a patient under his care, whose labour had commenced twenty hours before. In her first labour, the perineum, a portion of the recto-vaginal septum and sphincter ani, had been destroyed, eleven years before. I found the head at the outlet of the pelvis, with the forehead under the symphysis pubis, and the occiput in the hollow of the sacrum, and it had been in this situation for seven hours, to the great danger of the remaining part of the sphincter and recto-vaginal septum. I advised waiting for a time, and not interfering, in the hope that the forehead would slide out under the symphysis, and the parts behind escape. The position of the head could not be altered with safety, and it would have been rash and unwarrantable to apply the forceps. In a few hours the child passed out, and no additional injury whatever was inflicted on the mother.

(CASE 57.) Mr. Thomas, Vauxhall-road, called me, on the 14th of October, 1841, to a case of protracted labour. The patient was æt. thirty-one, and was of very short stature, though the bones of the extremities were not bent. Labour began on the Saturday night, and continued till the following Wednesday, at two P.M., when I first saw her. The pains had been feeble and irregular, and she was not exhausted even then, but was able to sit up and walk about the room. Os uteri not half dilated, the head had not begun to enter the brim, and the catheter was not required. The pelvis was contracted at the upper aperture, and I thought it extremely probable the head would not pass till perforated; but as there were no local or constitutional symptoms which justified interference, I recommended for some time longer to see what nature would do. Little change took place till the following morning, when the head became swollen and compressed in the brim, though the os uteri was still imperfectly dilated. The pulse became rapid and feeble, and she was occasionally incoherent. As soon as these symptoms appeared, Mr. Thomas immediately sent to me, and I went without delay, and deli-

vered with the perforator and crotchet, but she died in twelve hours. The result of this case would probably have been very different had we proceeded to deliver twenty-four hours sooner, and I can never think of it without regret.

(CASE 58.) St. Marylebone Infirmary, 5th of December, 1841. First labour. Great distortion of the bones of the lower extremities and pelvis. After being in labour about forty-eight hours, and no part of the head having entered the brim, and the os uteri not being fully dilated, and the pains threatening rupture of the uterus, the head was opened, and the extraction required great force. Both the brim and outlet were much distorted. Recovered.

(CASE 59.) On the 12th of February, 1842, I delivered a woman, æt. nineteen, in the lying-in ward of the St. Marylebone Infirmary, whose pelvis and extremities were distorted by rickets. The labour began on the 9th of February. The membranes ruptured on the 10th. On the 11th the os uteri was not dilated to the size of a half-crown; the head was wholly above the brim, and the base of the sacrum easily felt. Active pains came on, and lasted during the night, and till two P.M. of the 12th. The os uteri was still very imperfectly dilated. The head entirely above the brim, now much swollen. It was clearly right to interfere, which I did, and she recovered without a bad symptom, though I now feel persuaded that she ought not to have been left so long in labour. The danger of rupture and fatal contusion of the uterus is great in all such cases, and delivery should be effected, as soon as it is evident the head cannot pass. I knew from the first, in this case, that it would not pass through the brim, but was prevented from interfering in consequence of hearing the pulsations of the fetal heart. Drs. Boyd, Hunter and Ballard saw this case.

(CASE 60.) On the 28th November, 1842, the same patient, having been admitted into the St. Marylebone Infirmary, in the seventh month of pregnancy, I induced premature labour by puncturing the membranes twice in the usual manner with my stiletted catheter. At nine P.M. the following evening, labour-pains commenced. The nates presented. At six A.M., 30th, I received a note from Dr. Boyd, informing me that the trunk and extremities of the child were delivered, but that the head could not be drawn through the brim of the pelvis. Before I reached the Infirmary, Dr. Boyd had succeeded in extracting the head, which was very much flattened on the

sides by the pressure. Child dead. Messrs. Ballard, Humphreys, and Uwins, were present.

(CASE 61.) On the 4th of June, 1842, Mr. Turner, of King-street, Bloomsbury, called me to a case of very protracted labour. It commenced on the Tuesday night, and continued till the Saturday at six A.M., during the whole of which time the patient had enjoyed no sleep, yet continued without any symptoms requiring interference. She then became exhausted: the discharge was very offensive, meconium passing freely, the bulky part of the head greatly compressed and swollen, and still above the brim; an ear not felt without difficulty. Orifice widely but not completely dilated. Movements of the child not felt by the mother since the commencement of labour. The sound of the fetal heart not heard. There could be no doubt about the necessity of speedily putting an end to the labour, and I felt no hesitation, and Messrs. Turner and Jones coincided with me, in thinking that the sooner the head was opened and extracted the better. This was done, the placenta was detached and expelled without hemorrhage, and the patient recovered in the most satisfactory manner. I have omitted to mention, that in this case there was a peculiar thickening at the upper and back part of the vagina, which seemed to arrest the progress of the head.

(CASE 62.) On the 18th of July, 1842, with Mr. Nicholles, Leicester-place, I saw a case of protracted labour. First child; æt. twenty-six. The labour began on the Saturday night, with slight pains at intervals: no sleep. On the Sunday morning the os uteri was dilated to the size of a half-crown. The labour continued till the Monday morning, when she complained of acute pains about the lower part of the uterus, and internal heat. V. S. to ten ounces. A grain of calomel and opium, which was followed by some sleep. Pulse, seventy-nine. I saw her at eleven P.M. on Monday, when the countenance was good; head clear. Tongue clean. Pulse one hundred and ten, rather feeble; skin hot. The greater part of the head above the brim, bones squeezed in it, and some difficulty in passing the fingers around it; an ear not felt. A great swelling under the scalp. Os uteri thin and soft, almost fully dilated, but the head still surrounded by it. Little or no uterine contraction. The heart of the child heard beating. At five A.M. the following morning: Great quickness of pulse, and confusion of head. Completely

exhausted. Not the smallest progress. Head more swollen and compressed. Vagina hot, puffy, and tender. The force required to extract the head after perforation, rendered it obvious that the head could never have passed in the exhausted state in which she was. No bad symptoms followed.

(CASE 63.) On March the 12th, 1828, I was called to an unmarried lady, whose abdomen had been slowly enlarging for several months. No suspicion having been entertained by her medical attendant that she was pregnant, mercury, diuretics, and the strongest cathartics had been given to remove the supposed dropsy, and tapping proposed. When I examined the abdomen, the fluctuation was as distinct as in any case of ascites, and the right lower extremity was œdematous. Having received a hint from her nurse that pregnancy was possible, I examined, and found the os uteri considerably dilated, and the membranes protruding. The presenting part of the fœtus could not be felt. Labour-pains having come on, and continued at long intervals during the night, I ruptured the membranes the following day, and sixteen pints of liquor amnii escaped. The head of the fœtus being greatly distended with fluid, it would not pass till perforated. Profuse hemorrhage followed the expulsion of the child and placenta, and she died three days after, from inflammation of the muscular coat of the uterus.

(CASE 64.) In 1834, I was called by Mr. Newson, to a woman in Warwick-street, who had been in labour nearly sixty hours, and to whom repeated doses of ergot of rye had been given. It was the first child. The head had not entered the brim, and the practitioner had not discovered that it was distended with fluid. After perforation and the escape of the fluid, the extraction was easy. Inflammation of the uterus, however, took place, which proved fatal in a few days.

(CASE 65.) On the 14th of July, 1829, Mr. Prout called me to see Mrs. Keene, æt. thirty-one, residing at No. 6, Draper's place, Euston-square. She had been long in labour with her first child, and there was some doubt about the nature of the presentation. After the escape of an immense quantity of liquor amnii, and the complete dilatation of the os uteri, the presenting part remained entirely above the brim of the pelvis. It was not till I introduced the hand into the uterus to deliver by turning, that we knew with certainty that the head presented, and the fœtus was hydro-

cephalic. I withdrew the hand on ascertaining the fact, and immediately opened the head, when several pints of a bloody fluid gushed out. It was easily extracted, but the delivery was followed by violent shivering, and the greatest exhaustion. She rallied, however, and passed a quiet night. On the following, and two or three subsequent days, the shivering fits returned at irregular periods, sometimes in a slight form, at others, in that of a severe rigor, followed by a flush of heat, and partial or general perspiration. During this time, the effects consequent to parturition proceeded as usual. The uterus slightly painful on pressure: lochia natural, bowels open: pulse one hundred and thirty-three to one hundred and forty, extremely feeble. No complaint of uneasiness, with the exception of a troublesome cough and hoarseness, with which she has been afflicted during the latter months of pregnancy. On the fourth day from delivery, the secretion of milk appeared for a short period, and afterwards receded. From this day to the 10th, the following were the symptoms: pulse rapid; skin universally of a dusky-yellow colour, and the heat of surface increased: respiration hurried: thirst, tongue dry, but not furred: great prostration of strength, sallow and haggard countenance: restless and sleepless nights, mental faculties undisturbed. The uterus had gradually subsided, and no pressure, however great, either on it or on the parts in its vicinity, caused pain, except in the right iliac region, where some uneasiness was felt; the flow of lochia natural: bowels regular. At this period, the hacking cough which had so troubled her became more frequent, and it was with difficulty she expectorated the ropy mucus which followed it, and which in the day amounted to about an ounce. From the eleventh day the respiration became more short and hurried: the pulse more rapid: occasional flushes of heat: thirst: extreme debility: diarrhœa. Pressure over the whole abdomen gave no uneasiness, nor was pain felt in any part of the chest, though auscultation plainly indicated the existence of disease, particularly on the right side. The patient made no complaint but of weakness and the cough. On the 12th the dyspnœa increased, and she sank exhausted in the evening. Mr. John Prout, who had carefully observed the progress of the symptoms from the period of delivery, was present with me when I examined the body. The uterus was of the size it usually is about the second week after delivery, and ex-

hibited externally no vestige of disease. On laying it open, its internal surface, as well as its muscular tissue, appeared also healthy, and the veins being traced, the right spermatic alone was found greatly enlarged and indurated. The uterus being removed from the body for more minute examination, an incision was made into the right superior angle, to which the placenta had been attached, and here its veins were discovered to be empty, and their internal surface of a scarlet colour. On tracing them towards the trunk of the right spermatic vein, they were found to contain a sanious purulent fluid, and were contracted in their diameters, and coated with false membranes. The veins of the right ovarium and Fallopian tubes were all plugged up with firm coagula. The spermatic itself was lined throughout its whole extent with dense membranes of a reddish or of an ash-grey colour. Its coats, independent of these membranes, were of extraordinary thickness and firmness, and more like those of a large artery than of a vein. Its whole cavity was contracted; in some parts occupied by a dark-coloured fluid, in others quite obliterated by adhesions formed between the surfaces of the membranous layers deposited within it. At the termination of the spermatic on the vena cava, its orifice was scarcely large enough to admit a crow-quill; traces of inflammation extended beyond this orifice, the vena cava being partially lined, from two to three inches above it, with an adventitious membrane strongly adherent to its coats, which were at this part double their natural thickness. In its passage upwards, the inflammation had extended a short distance into the right emulgent vein, which near its orifice was coated with a pellicle of lymph. On opening the thorax, a stream of air escaped from the right side; the lungs were collapsed, and upwards of two pints and a half of a red-coloured serum were found in the sac of the pleura. The right inferior lobe was coated with lymph, and a portion of the pleura on the anterior surface was destroyed, and a black gangrenous slough exposed in the substance of the lung. The pulmonary texture around was condensed, and of a deep violet or livid colour. The left inferior lobe was also partially coated with a thin layer of lymph, and the pleura at one point on the anterior surface was elevated, as if by a small hard globular body beneath it. When this was laid open, it appeared to consist of a thick yellowish-coloured cyst or capsule, containing a soft black matter like a gangrenous eschar. The substance

of the lungs around was unusually dense, and of a dark, livid colour.

(CASE 66.) A woman near the full period, residing at No. 9, Castle-street, St. Martin's-lane, was seized with slight labour-pains on Saturday, June 18th, 1842. The liquor amnii soon after escaped. The pains continued during the 19th and 20th, at long irregular intervals, and had little effect on the os uteri. Early on the morning of Tuesday, the 21st, they were stronger, and more frequent, and the midwife thought the labour would soon be finished. Suddenly a violent pain like spasm was experienced in the epigastric region, and soon after sickness, faintness, hurried breathing, and coldness of the extremities took place. Mr. Tucker was called to her about two hours after the occurrence of these symptoms, and found the placenta filling the os uteri, which was considerably dilated, and some hemorrhage going on. I saw her not long after, and thought she would probably die before the delivery could be completed. The hand passed readily into the uterus, and there being no pain, came in contact with what seemed, at first, the bodies of two children. It was passed on to the fundus, where there was a foot felt. I grasped this, and without the slightest exertion brought it down, and extracted the trunk and extremities of the child, but the head would not follow. I perforated the back part, when there escaped a very large quantity of fluid, and it was not till this began to flow, that I properly understood the cause of the difficulty. With the crotchet passed into the opening, the head was easily drawn through the pelvis, and the placenta, being loose, was soon removed. Little hemorrhage took place, and for twenty-four hours the symptoms were so favourable, that it appeared she might recover. The sickness, however, never subsided, and she died suddenly forty-eight hours after being delivered. I examined the body the following day with Mr. Tucker, and we found all the coats of the uterus torn, from the fundus to the orifice on the anterior part. There were about two ounces of blood in the peritoneum. The bones of the head were at least twice the usual size, the ossification particularly of the parietal bones having kept pace with the distention of the head from the fluid.

(CASE 67.) Mrs. G——, æt. thirty, No. 96, Drummond-street. Being at the full period of pregnancy, the liquor amnii began to escape at six P.M., 22d June, 1842. Labour-

pains commenced at one A.M., of the 23d, and Mr. Kennedy, of Tavistock-square, saw her at three A.M. The pains were feeble till eleven, and then for several hours after, they became more active and frequent. At three P.M. a small loop of the funis along with the head was felt at the brim of the pelvis. The pains gradually ceased after three, and she complained of cramps about the stomach. At six there was no dangerous symptom, but at eight violent pain was felt at the fundus uteri. At 10 P.M. I first saw her with Mr. Kennedy; she was then sitting up in bed supported by pillows, the breathing hurried, and pulse feeble, sickness and vomiting. She complained of excruciating pain in the upper part of the uterus, which she could not bear to be touched, and which felt remarkably hard and irregular. Slight hemorrhage from the uterus; the funis still felt, but the presenting part had receded beyond the reach of the finger. I passed the hand into the uterus, and felt the placenta adhering to the posterior wall, but could feel no part of the child. So violent was the pain produced by the hand in the uterus, that I withdrew it without making any attempt to pass it through the opening in the uterus to extract the child. A large opiate was given, and she fell asleep for a short time. Feeling anxious that she should not die undelivered, we resolved to make an attempt to extract the child. I again passed the hand into the uterus, carried it forward through a great rent in the fundus, when it came immediately into contact with one of the feet, which I seized and brought back into the uterus. I had little difficulty in extracting the trunk and extremities of the child, but the head would not follow till opened behind the ear, and then several pints of fluid escaped. Abdominal inflammation followed, the acute symptoms of which yielded to treatment; but fifteen days after delivery, feculent matter began to pass by the vagina, and the whole continued to escape through the vagina for thirteen days after, when she died. The omentum and all the parts around the uterus were glued together. The lower part of the ileum adhered firmly to the fundus uteri. On separating the ileum, a great irregular opening was seen in the uterus, the edges of which were in a black sloughing state. The ileum was perforated in the part corresponding with the rent in the uterus, and through this opening the feculent matter had passed from the ileum through the cavity of the uterus into the vagina. Had the cause of the difficulty been ascertained sufficiently early

in these five fatal cases of congenital hydrocephalus, and the operation of craniotomy been performed, it is impossible to doubt that some, if not all of them, would have ended favourably.

(CASE 68.) On the 31st August, 1842, I was called to a case of labour in St. Marylebone-street, Golden-square, which was reported to have commenced three days before. It was the first labour. The patient, *æt.* twenty-nine, was in a state of the greatest excitement. The tongue loaded ; lips parched ; pulse rapid. Constant moaning, and restlessness, with occasional delirium. The *os uteri* rigid, and not half dilated, and the head of the child entirely above the brim of the pelvis. Drs. H. Davies and Andrews saw the case with me, and we were all of one mind about the necessity of immediate delivery, and that it was impossible to save the child. The difficulty of extracting the head after perforation proved the correctness of our opinion. A great hemorrhage followed the child, but it ceased on removing the placenta artificially, and employing proper means to secure contraction of the uterus. Recovered.

(CASE 69.) On the 19th September, 1842, with the late Mr. Lambert, I saw a lady, above thirty years of age, in Moleseworth-place, Kentish Town, in whom labour had commenced the previous morning at six o'clock, and the pains had continued strong and frequent during the whole day and night. At half-past seven A.M., the pains were becoming feeble. There was great exhaustion. The *os uteri* imperfectly dilated, and the head, swollen and compressed, had not entered so far into the brim as to allow an ear to be felt. The vagina and external parts greatly swollen, and so tender that she could not bear the ordinary examination to be made. An unsuccessful attempt had been made to deliver with the forceps. The exhausted condition of the patient made it certain that the child would never be expelled by the natural efforts, and that it was unsafe to allow the labour to continue longer. After perforation, the power of the uterus was not sufficient for the expulsion of the head. Recovered.

(CASE 70.) On the 26th October, 1842, I received a note from Mr. Fitzpatrick, Lisson-street, New-road, requesting my opinion in a case of protracted and difficult labour. Here strong and regular pains had continued for nearly thirty hours. The *os uteri* was not half dilated, and the whole head of the child was above the brim. The pelvis was so

much distorted, that it was obvious the head would never pass, and that no good could result by delaying to complete the delivery with the perforator and crotchet. Long-continued and great force required to extract the head.—About eleven months before, after a very protracted labour, Dr. Merriman was consulted respecting this patient, and delivered her by craniotomy. She would not consent to the induction of premature labour in the subsequent pregnancy, but went to the full period, with the result above described.

(CASE 71.) On the 4th of February, 1843, Mr. Pope requested me to see a lady who had been many hours in her first labour, and the head of the child had long been arrested in the outlet of the pelvis. The pulse was very rapid; tongue dry. There was no hope of delivery being effected by the natural powers, and the child being dead, it was immediately extracted with the crotchet. Symptoms of uterine inflammation were observed before twenty hours had elapsed, which terminated unfavourably in the course of a few days.

(CASE 72.) On the 31st March, 1843, Mr. Taylor, of Leicester-square, called me to see a case of labour, in which the head, arm, and funis, without pulsation, presented. Turning could not have been performed without difficulty and danger, the liquor amnii having all escaped long before. The head was lessened and drawn forward without much difficulty, and the patient recovered favourably.

(CASE 73.) On the 6th May, 1843, Messrs. Bowling and Pickering requested me to see a young woman at Hammer-smith, who had been upwards of twenty-four hours in her first labour. The nates presented, and the conjugate diameter of the brim did not, in our opinion, exceed two inches and a half. The outlet also was distorted. I brought down a foot into the vagina, by passing up the left hand into the pelvis, and using the blunt hook with the right. The nates, trunk, and superior extremities were extracted with difficulty. A considerable time elapsed before I could succeed in passing the perforator along the back part of the neck to the head, and opening it. At last this was accomplished behind one of the ears, and a portion of the brain evacuated. The crotchet was next introduced into the opening, and strong extracting force employed, till the head passed, with the sides squeezed together. The operation lasted about two hours and a half, and occasionally I felt disposed to abandon

it as impracticable. The patient recovered without a single bad symptom of any kind. Had premature labour been induced in this case two or three months before, the operation would have been comparatively safe and easy.

(CASE 74.) Wednesday, 31st May, 1843. Brook-street, New-road. First pregnancy; full period. Labour commenced on Monday night. Os uteri fully dilated. Tuesday morning, pains irregular the whole of the day, and the whole of last night. At ten A.M. Wednesday, violent and incessant pain. Head of child swollen and compressed in the brim of the pelvis. An ear felt with difficulty behind the symphysis pubis. The finger passed around the head gave pain. Retention of urine. Difficulty in passing the catheter. Pulse full and frequent. V. S. ad $\bar{3}x$. recommended, waiting six hours. At four P.M., head more swollen and jammed in the brim. Impossible to pass the blades of the forceps. Violent and constant pain, threatening rupture of the uterus. No chance of the head ever being expelled. After perforation, I was compelled to employ great force to extract it, which I did with the craniotomy forceps, in consequence of the bones being lacerated with the crotchet. Retention of urine for some days, but the patient ultimately recovered, without any injury to the soft parts.

(CASE 75.) A few days before this case occurred, I was consulted respecting a patient who had been sixty hours in labour. The meconium was passing. The discharge from the parts was fetid, and the child being dead, and the mother completely exhausted, I proceeded at once to deliver, and the patient recovered.

(CASE 76.) On the 1st June, 1843, with Mr. Hume, Vauxhall-road, I saw a woman, æt. twenty-seven, with distorted pelvis, who had been delivered of four dead children. On this occasion, the labour had continued upwards of twenty-four hours, and the head was completely jammed in the brim of the pelvis. The pains had nearly gone, and I thought it would have been better had the delivery been effected earlier.

(CASE 77.) On Saturday, the 20th of August, 1843, at half-past ten A.M., I was requested to see a patient, æt. thirty, the mother of three children, who had not been more than seven hours in labour when she suddenly felt a cutting pain within the abdomen, followed by faintness, coldness of the extremities, hurried respiration, and ghastly appearance of

the countenance. The head of the child was stated to have been pressing upon the perineum at the time when these symptoms spontaneously occurred. The pains did not altogether cease, and the head did not recede much out of the pelvis. I immediately extracted the child with the crotchet, but the patient died a few minutes after the delivery. The forceps would have been employed in this case, had the patient at the time not been moribund, and in a condition to render the application of the blades impracticable. The body was examined the following day, and an immense rent found in the left side of the cervi and body of the uterus and vagina, and the sac of the peritoneum full of blood.

(CASE 78.) On Tuesday, 10th October, 1843, about eight A.M., Dr. Meryon informed me that he was in attendance upon a patient, in whom the head of the child had been firmly impacted in the pelvis since about half-past one, and for several hours without the slightest advance. The pains were becoming less frequent, and he thought the case would require the use of the forceps. Being engaged at the time, I sent the forceps to Dr. Meryon; but the blades could not be introduced, and locked, for want of room between the head and pelvis. Two hours after, I saw the case, and found the head so firmly impacted in the brim, and so high up, that I did not consider it safe to attempt again to employ the forceps. The uterine action was so strong and uninterrupted, that it appeared probable rupture would soon take place if we did not interfere. The sound of the fetal heart could not be heard. Two years before, this patient had been delivered with the forceps in a public institution. The child's head was grievously injured, and it died in a few hours, and the health of the mother was not restored for several months. Subsequently she had been delivered by the natural efforts of two small female children alive. Dr. Meryon and I judged that the delivery was necessary, and after perforation, the great force required to extract the head proved that the opinion was correct, and that it could never have been expelled nor drawn down with the forceps without being lessened. The placenta was retained a considerable period, and was removed artificially, when hemorrhage occurred. Recovered favourably.

(CASE 79.) At four A.M., Wednesday, October 11th, 1843, Mr. Johnston, of Conduit-street, requested me to see a lady who had been in labour with her first child since the Monday

morning. The liquor amnii had escaped before the commencement of the pains. The dilatation of the os uteri went on very slowly, and the ergot of rye which had been given had no effect, nor thirty drops of laudanum. The head of the child was firmly squeezed into the brim of the pelvis, but there was no local or constitutional symptom which seemed to require interference. Twelve hours after, had slept occasionally; slight pains at long intervals. Head in the same position; more swollen. Great difficulty in introducing the catheter. Small, feeble pulse. Abdominal tenderness. Sense of soreness within the pelvis. Discharges fetid. A most unfavourable change had taken place so rapidly in the symptoms, that further delay could not have failed to be succeeded with the most fatal results, and we resolved, therefore, to abandon all hope of preserving the life of the child, and if possible to secure the safety of the mother. About an hour and a half elapsed after perforating the head before I could succeed in extracting it with the crotchet and craniotomy forceps. The whole head was literally torn to pieces before it could be delivered, and great difficulty was afterwards experienced in drawing the trunk and extremities of the child through the pelvis of the mother. A considerable part of the difficulty in this case arose from the unusual size of the child, and the small size of the pelvis.

(CASE 80.) On the 12th January, 1844, in Meard-street, I saw a case of very protracted labour, from slight distortion of the pelvis, with Mr. Lambert. The patient had been delivered two years before by another practitioner, who performed the operation of craniotomy. The head of the child had not entered the brim of the pelvis, and there was a loop of the navel string without pulsation in the vagina. Mr. Lambert had attempted to deliver with the forceps, though it was known that the child was dead, which I thought bad practice. Perforated and extracted the head after it was much lacerated. Recovered.

(CASE 81.) On the 3d October, 1844, I saw a lady at St. John's Wood, who had been forty-eight hours in her first labour. The face presented, and had not passed through the brim of the pelvis. Os uteri imperfectly dilated. Child dead. Not the slightest movement in the mouth, when the finger was introduced and the parts irritated. This had not been the case twelve hours before. As there was no chance of the head being expelled, and great probability that mischief

would soon ensue, I perforated and extracted the head without difficulty; but great caution was required to prevent laceration of the perineum.

(CASE 82.) Mrs. S——, æt. thirty-one. At half-past eight A.M., Monday, Mr. Shaw, of Hampstead, called to request my assistance in the case of this patient. He stated that it was her second labour; that the first was protracted beyond forty-eight hours, and that the child was extracted with the forceps, dead. Mr. Shaw informed me that pains began on Saturday night at twelve o'clock, that at four A.M. Sunday, 20th October, 1844, the membranes gave way, and the os uteri was considerably dilated. The labour went on the whole of Sunday, but the head did not enter the brim of the pelvis. Late in the evening, a drachm of the ergot of rye was given, with the effect of slightly increasing the pains for a short period. Another drachm was given early in the morning, with the same effect, but still there was no progress made, and it became highly probable that the labour would not be completed without artificial assistance. "Half-past eleven A.M. Pains have nearly ceased, appears much exhausted, and is at times slightly incoherent." She said she felt at times as if she would go out of her senses. No tenderness of the abdomen, on pressure, but it felt hard and tense. Pulsations of fetal heart not heard. Os uteri little more than half dilated. A fetid yellow discharge. The base of the sacrum projected considerably forward. The necessity for delivery was obvious, and we both thought that it was impossible to deliver with the forceps. We did not for a moment think of the operation of turning in such a case. The head was opened and extracted with so much difficulty, that it was certain delivery would never have been accomplished without reducing the size of the head. The placenta adhered firmly to the uterus, and required to be artificially detached and extracted. The bones of the right leg of this patient were slightly distorted from rickets. Recovered.

(CASE 83.) On the 10th November, 1844, I saw, at 97, Grove-street, Camden Town, a case of labour, with prolapsus of the funis. The patient was in her fourth labour. Her first had been tedious and difficult, and the child was born dead, without artificial assistance. The second child was born dead in the sixth month. In the third pregnancy, she went to the eighth month; the feet presented; the labour

was long and difficult, and the child was extracted dead. The fourth labour commenced last night, Saturday, 9th November, at seven o'clock. At nine, the os uteri was fully dilated. The membranes were unruptured, but the presenting part could not be felt. Mr. ——— ruptured the membranes, and soon after a lot of the funis descended into the vagina. The pulsations were strong. The pains ceased till one A.M., when the arteries of the cord had ceased to beat. At half-past four A.M., there was little pain. Eighty grains of ergot in infusion were given at short intervals, in three or four doses, with little effect, except producing sickness. An attempt was then made to push the head aside, and bring down the feet. At six A.M., strong and regular pains. A great part of the funis in the vagina without pulsation. Os uteri widely dilated. Head had not entered the brim. Half-past six, the child being dead, and there being no prospect of its being expelled by the natural efforts, I perforated, and extracted it with the crotchet. The recovery was perfect. Before the membranes were ruptured in this case, the operation of turning might perhaps have preserved the child's life, though the pelvis was small.

(CASE 84.) 19th Nov., 1844. Royal College of Physicians, Pall-mall East. Mrs. T———; labour began at four A.M., and went on regularly till half-past nine. The pains then partially ceased, and she began to suffer from sickness and vomiting. The pains went entirely off, and constant sickness followed. Hemorrhage took place, later and to a considerable extent. There being no pain, Mr. Chilcote gave first twenty grains of ergot, and repeated it about three-quarters of an hour after. No pain followed, but the hemorrhage became more profuse. I saw her about one o'clock. There was incessant vomiting, and the flooding continued. The head of the child had receded so much that it was almost beyond the reach of the finger, and perfectly moveable. No pain of any consequence. Mr. Chilcote made pressure over the uterus without any effect. I felt a ragged mass, which at first I took for placenta at the upper and back part of the vagina and os uteri. She was evidently sinking, and immediate delivery was necessary. There could be no doubt that rupture of the uterus had taken place, and instead of turning the child, which had not been felt to move for upwards of two weeks, it seemed most expedient to open and extract the head, and to avoid inflicting any further injury upon the uterus. I pro-

ceeded to deliver, but had the utmost difficulty in perforating the head, from its being so moveable, although Mr. Chilcote was making firm pressure over the abdomen. I was obliged to pass the whole of my left hand into the vagina, and then distinctly felt that a part of the uterus and vagina behind had given way, and that this was the cause of the hemorrhage and the other symptoms. In extracting the head I felt a portion of intestine pushing through the rent, and there was difficulty in keeping it up with the back of the hand while extracting the head. After this was done, I re-introduced the hand, felt the piece of intestine protruding through the rent, and carefully pushed it back. The placenta being detached, was immediately taken away. At four P.M., the pulse was rapid and feeble, face cold, clammy perspiration, great pain about the region of the heart, no sickness. She passed a most distressed night, and died at eight o'clock next evening, with intense pain of abdomen and incessant vomiting. There was no distortion of the pelvis or enlargement of the fetal head to account for this accident, and no symptom to indicate that it was about to take place. It is most probable that softening or atrophy of the coats of the uterus had taken place at the part where the laceration occurred, before the commencement of labour.

(CASE 85.) At half-past two A.M., 20th November, 1844, saw a patient with Mr. Fitzherbert, in Portsea-place, Connaught-square. First child. The forehead was under the symphysis pubis; the position could not be determined. The pains being strong and regular, it was considered advisable to leave the case for a time to nature. At two P.M., when the labour had continued about sixty hours, and there was every reason to believe that the child was dead, and no probability of being able to extract the head safely with the forceps, the perforator and crotchet were employed. Recovered.

(CASE 86.) On the 27th January, 1845, I saw a case of labour with Mr. Bryant, at 20, South Wharf-street, in which the face of the child presented, and the pelvis was unusually small. The head was so firmly impacted in the pelvis, that it was impossible to pass the blades of the forceps. Recovered.

(CASE 87.) On Wednesday, 23d April, 1845, near the York Road, Lambeth, with Mr. Carruthers. I saw a patient æt. thirty, in whom labour had commenced on the previous Sunday with rupture of the membranes. The pains con-

tinued during the Sunday night, and the whole of Monday and Tuesday. At six A.M., Wednesday, she was delirious; the pulse rapid and feeble; tongue very loaded. Head of child greatly swollen, jammed in the brim of the pelvis; an ear not felt. Meconium passing. Most fetid discharge from the vagina. Immediate delivery was necessary, and the head extracted with a good deal of difficulty after perforation. Though left too long in labour, this patient recovered without an unfavourable symptom.

(CASE 88.) At the beginning of October, 1845, I was called to a case of difficult labour, in which the head and both arms of the child were presenting, and repeated strong efforts had been made by two practitioners in attendance, to deliver by turning. The uterus being firmly contracted around the child, which was dead, I did not repeat the attempts to bring down the feet, which could not have been accomplished without great danger to the mother. I opened and extracted the head, and the patient recovered.

(CASE 89.) August 2d, 1846, in Mecklenburgh-square, a lady, the mother of several children, suddenly experienced, without any apparent cause, during the progress of a natural labour which had lasted only twelve hours, a violent cramp in the abdomen. The natural pains immediately ceased, and the head, which had not completely entered the pelvis, receded a little. I saw her an hour after this alarming occurrence, when she was suffering great and constant pain in the region of the uterus, which was so tender that the slightest pressure could not be endured, and felt to her, she said, as if rolled up. There was no vomiting, but the rapid pulse, anxious countenance, and other symptoms, left no doubt that the uterus was ruptured. Gentle pressure being made over the fundus, the head was opened and extracted without great difficulty. The placenta was wholly detached, and soon came away after the child, with little hemorrhage. Vomiting took place the following morning, after she had passed a tranquil night without any unfavourable symptoms. Tympanitis succeeded, without much pain or vomiting. The pulse came down from 120 to 90. On the 4th, vomiting of dark matters took place. Abdomen much diminished. Anxious sunk countenance; rapid, feeble, intermitting pulse. Coldness of extremities. The symptoms of exhaustion rapidly increased, and Mrs. H. died at two the following morning. An unsuccessful attempt had been made to deliver with the forceps before I saw the pa-

tient. The fatal accident in this case could only be attributed to softening or atrophy of some portion of the uterine parietes,—it occurred without any warning, and could not have been prevented.

(CASE 90.) At four A.M., 29th January, 1847, I saw a young lady, Mrs. ———, in labour with her first child. The membranes were ruptured the preceding evening. The os uteri was fully dilated; the head in the brim of the pelvis; the pains were strong and regular, and every circumstance was present to induce me to believe that the process would be safely completed in three or four hours. The labour, however, lasted the whole day, and at night the head had not advanced. It had become swollen and compressed; the soft parts were tender to the touch; there was retention of urine and violent cramps in the region of the uterus, threatening rupture. There was great restlessness, with occasional incoherence, and she had long lost all hope of ever being delivered without assistance. The necessity for immediate delivery was apparent, and the head was extracted with great difficulty. No bad consequence followed. The mother of the lady had many years before been delivered with the forceps, and had the recto-vaginal septum extensively lacerated.

(CASE 91.) On the 10th April, 1847, I received a note requesting my attendance in a case of distorted pelvis, in which premature labour had been induced. A superior extremity had presented; the operation of turning had been performed, but the head could not be drawn through the brim of the pelvis. I endeavoured to extract the head without craniotomy, but could not succeed. The perforator was passed up to the back part of the head, and the delivery was speedily accomplished with the crotchet. Recovered.

(CASE 92.) 23d April, 1847, St. Marylebone Infirmary. A woman æt. twenty-two, with disease of the spine, paralysis of the lower extremities, and great distortion of the brim and outlet of the pelvis, had been in labour twenty-six hours when I was called to deliver her. It was her first child, and she was at the full period. The os uteri was dilated to the size of a crown; the membranes had long been ruptured, and the head was so high up, that the finger could scarcely reach it. Some difficulty was experienced in perforating the head, in consequence of its height, and the undilated state of the os uteri. When the bones of the cranium had been completely

torn into pieces with the crotchet which had been introduced within the head, the craniotomy forceps was employed with great effect, but the head could not be drawn through the outlet until the crotchet had been passed up into the mouth, and strong and long-continued extracting force employed. A practitioner present during this difficult operation, suggested the propriety of trying to extract the head with the common midwifery forceps, when the craniotomy forceps had failed. The hint recalled to my mind a case of protracted labour, which had occurred some months before, in which the medical attendant, after opening the head, and finding some difficulty in extracting it with the crotchet, had recourse to the common midwifery forceps, and ruptured the perineum extensively.

(CASE 93.) On Saturday, October 9th, 1847, a lady, æt. twenty-six, had been in labour with her first child twenty-four hours. The liquor amnii had escaped before the pains commenced. The os uteri was fully dilated, but the greater part of the head remained above the brim of the pelvis, and an ear could not be felt. The pains, which were neither frequent nor regular, occasioned great suffering to the patient, but had little effect in pressing down the head, which was not impacted in the brim. The local and constitutional symptoms did not appear to render immediate delivery necessary, but a circumstance was observed which excited a suspicion that the parietes of the uterus were unusually thin, and in danger of laceration. Near the umbilicus, through the abdominal and uterine parietes, a small moveable body was felt projecting, which resembled one of the feet of the child. It was so prominent that it could be readily seen and felt, as if covered only with a thin membrane. A strong broad binder was applied around the body, and the patient requested to abstain from all voluntary efforts to expel the child. The labour was allowed to continue until eight o'clock the following morning, Sunday the 10th, when the pains had nearly ceased, and it had become perfectly obvious that it would never be completed by the natural efforts. The head had not advanced through the brim of the pelvis, and being still beyond the reach of the forceps, the perforator and crotchet were employed, and the force required for its extraction proved the necessity of the operation. The patient recovered in the most favourable manner.

(CASE 94.) On the 28th February, 1848, I saw a young

lady who had returned from India in the month of October, from ill health during her first pregnancy. She had suffered for some time from excessive tenderness of the vagina and external parts. Labour commenced on the morning of the 27th, with the discharge of the liquor amnii. The pains had continued upwards of twenty-four hours before I saw the patient, when the head of the child was at the outlet of the pelvis. The vagina so exquisitely tender that she could not bear an ordinary examination to be made. The urine had been drawn off with the catheter. The head was moveable, and there was no injurious pressure. Tongue white. Pulse calm. It appeared extremely probable that the uterine contractions would increase in strength, and that the labour would be completed by the natural efforts. At eight P.M., not the slightest progress. 29th February. At two A.M., no advance. Pulse rapid. Exhaustion had taken place, and it was evident to Dr. Arnott and myself, that without artificial help the head would never be expelled, and that it would have been on every ground unjustifiable to attempt to deliver with the forceps. The soft parts were so painful that the finger could not be passed around the head without exciting the greatest distress. The heart of the child could not be heard. After the volume of the head had been diminished, the extraction was not effected without exciting the most acute pain. The placenta was soon expelled, and the recovery was favourable. There was no disproportion in this case between the pelvis, and head of the child, as far as we could ascertain, and the difficulty appeared wholly to depend on the morbid condition of the nervous system of the uterus, which had existed before the pregnancy commenced.

(CASE 95.) At three A.M., on the 30th of March, 1848, I saw a young lady in her first labour, who was in a state of great excitement, with flushed face, and rapid feeble pulse, and who screamed violently, and threw herself about during the pains, though they were not strong. The os uteri was thick, rigid, not half dilated, and high up in the pelvis. I was informed that the labour had commenced twenty-four hours before, with rupture of the membranes, and feeble irregular pains. In the evening she complained of headache, and chloroform was twice administered. The state of excitement and disturbance of the brain led us to fear that she would be attacked with convulsions, but it was not considered safe to employ venesection. Cool air was admitted, and ice,

and vinegar and water in a bladder, applied to the head with some effect; but the restlessness and excitement, and occasional incoherence continued throughout the day, and became so alarming at nine P.M., that it was considered absolutely necessary to complete the delivery by artificial means, and the os uteri being imperfectly dilated, and no part of the head within the brim of the pelvis, it was impossible to apply the forceps. The extraction of the head was effected without much difficulty, as there was no distortion, and the effects of the narcotic poison gradually disappeared.

(CASE 96.) At ten P.M., May the 2d, 1848, near Kennington, I saw Mrs. T——, who had been in labour with her first child upwards of forty-eight hours. Chloroform had been given in this case, so as to produce complete insensibility. The pulse was excessively rapid and feeble when I first saw the patient. The tongue furred, lips dry and parched, urgent thirst. Abdomen tender. The head of the child completely jammed in the outlet of the pelvis, which was small. The labia, perineum, and vagina swollen and œdematous. Fetid discharge. The finger could not be passed around the head without great difficulty and pain. The child dead. I opened and extracted the head slowly, to avoid bruising the soft parts, which were in a condition rendering them prone to sloughing. The placenta was retained two hours, and then detached with much difficulty, being throughout firmly adherent to the uterus. Recovered.

THIRD REPORT.

INDUCTION OF PREMATURE LABOUR IN CASES OF DISTORTION OF THE PELVIS—CANCER OF THE GRAVID UTERUS—UTERINE AND OVARIAN CYSTS AND TUMOURS—ORGANIC AND NERVOUS DISEASES OF THE HEART—DROPSY OF THE AMNION—OBSTINATE VOMITING—HEMORRHAGE FROM THE BOWELS—CHOREA AND INSANITY DURING PREGNANCY.

(CASE 1.) At eight P.M., 16th April, 1831, I saw a patient with Mr. H. at No. 4, Brewer-street, who had been in labour with her fourth child the greater part of the day. The os uteri was widely dilated, but the membranes were unruptured, and the presenting part was beyond the reach of the finger. At ten P.M. I ruptured the membranes, and ascertained that the presentation was natural. The pains were strong and regular, and continued to return at short intervals till three o'clock on the following morning, when they began gradually to diminish in strength and frequency. At six A.M. the pains had wholly gone off, and the head was firmly impacted in the brim of the pelvis, and much swollen. The pulse was frequent and feeble, and all the usual symptoms of exhaustion were present. At seven A.M. Dr. H. Davies saw the patient, and agreed with us in thinking that immediate delivery by perforation was necessary. After opening the head, I found little difficulty in extracting it with the crotchet. No bad symptoms followed. I afterwards learned that this woman had been delivered of her first child by the same means. At the end of the seventh month of her second pregnancy, labour came on spontaneously, and the child was born alive without artificial assistance, and has been reared. Premature labour again came on spontaneously at the commencement of the eighth month of her third pregnancy. The nates presented, and the child was also extracted alive. Dr. H. Davies in-

duced premature labour at the seventh and a half month of her fifth pregnancy, and the child was born alive, but died soon after in convulsions. Occurrences similar to those observed in the preceding and following cases must originally have suggested the idea of bringing on premature labour artificially in cases of distorted pelvis, and probably led, in 1756, to that consultation of the most eminent practitioners in London, at which the practice was approved of, and soon after successfully carried into effect by Dr. Macaulay.

(CASE 2.) On the 20th May, 1828, a woman twenty-nine years of age, with slight distortion of the pelvis, was admitted into the British Lying-in Hospital to have premature labour induced. Dr. H. Davies detached the membranes from the lower part of the uterus without rupturing them. Labour came on eight days after, and the nates presented. I extracted the trunk and extremities without much difficulty, but the head could not be drawn through the brim of the pelvis without the employment of much force for a considerable period, during which time the pulsations in the cord gradually ceased, and the child was born dead. It was evident that the forceps could not have been used with advantage in this case, and that had the presentation been natural, the child would have been exposed to much less risk. This patient had been six times pregnant, and had gone to the full period twice, when it was necessary to perforate. Labour came on spontaneously at the seventh and half month of her third pregnancy, after an accident, and the child was born alive, and has been reared. Dr. H. Davies has induced premature labour three times since, at the seventh and half month of pregnancy in this patient; but although the children have all been born alive, none of them have long survived.

(CASE 3.) In the autumn of 1829, I saw a lady under thirty years of age, who had been forty-eight hours in labour with her first child, under the care of Mr. Tucker. The os uteri was not then fully dilated, and the vagina was swollen and tender. The head of the child presented, and it was strongly compressed in the brim of the pelvis, through which the greater part of it had not passed. The labour-pains were becoming more and more feeble, and had no effect in advancing the head. The pulse was rapid, and the strength much exhausted. As the forceps could not be applied with safety, and the immediate delivery was required, I opened

the head, but the bones and integuments were much lacerated before the delivery could be completed with the crotchet. No unfavourable symptom followed. In 1831, the same patient being in the seventh and half month of her second pregnancy, I resolved to induce premature labour. For this purpose, I detached the membranes from the cervix of the uterus with a large bougie, the os uteri being too high up to be reached with the finger, and the separation of the membranes effected by it. A week elapsed, but no labour-pains came on. I employed the bougie a second time still more freely, but no signs of labour followed. Dr. Merriman then saw the patient, and recommended puncturing the membranes with a slender silver catheter much bent. She was placed upon the sofa, on the left side, with the knees drawn up to the abdomen, and separated with a pillow. The exact situation of the os uteri was then ascertained with the forefinger of my right hand. Along this finger, the fore and middle fingers of my left hand were then passed up to the posterior lip of the os uteri, and in the groove formed between these fingers, the right finger having been withdrawn, the point of the catheter was pushed gently forward into the orifice of the uterus, and it passed upward about three inches towards the fundus uteri, before I was sensible of any resistance from the membranes. The liquor amnii immediately began to flow through the catheter, when the membranes were punctured, and labour-pains followed in a few hours. The labour was very tedious, but the child was at last expelled alive, and is now, in 1842, a fine healthy boy.

(CASE 4.) In 1833, the same patient being at the end of the seventh month of her third pregnancy, another medical practitioner was consulted, who, after three unsuccessful attempts, succeeded in bringing on labour. The liquor amnii did not begin to escape until a week after the last effort. The presentation was preternatural, and the child was still-born.

(CASE 5.) On the 28th Dec. 1837, the same patient being near the end of the eighth month of her fourth pregnancy, I punctured the membranes without difficulty, with a large probe-pointed, stiletted catheter, which I have now successfully employed in all cases of this description since 1836. The liquor amnii began to escape immediately after the stilette had entered the membranes, and continued to flow

slowly during the whole of the 29th. Neither on this, nor on any other of the former occasions, could the presentation be ascertained when the membranes were perforated. Labour-pains became strong and regular on the afternoon of the 30th, and the head presented. At ten P.M. the head was expelled, after remaining four hours strongly compressed in the brim of the pelvis. On clearing the brim, it was born in a few minutes; the respiration was established with great difficulty, but the child lived and enjoyed good health for a month, when it was exposed to cold, and was suddenly destroyed by inflammation of the lungs. Dr. Child was present when the membranes were perforated. This patient had not suffered from rickets in early life, and there was no deformity in any other part of the body.

(CASE 6.) About the end of January, 1839, this patient again became pregnant, and the membranes were perforated on the 21st September. On the 23d, as little liquor amnii had escaped, and there was no symptom of labour, the operation was repeated, but little fluid followed, and the labour did not come on till the 26th, at four A.M. The first stage was soon completed, but the head did not pass through the brim of the pelvis till three in the afternoon, when it was greatly swollen, and compressed on the sides. It breathed irregularly for an hour after birth, and then died. Had the labour been brought on a fortnight earlier, as I proposed, the probability is that the child would have been born without difficulty, and lived.

These cases are sufficient to prove that the practice of inducing premature labour at the seventh and half month of pregnancy, in slight distortion of the pelvis, is attended with little danger to the mother, and that it has been the means of preserving the lives of children who must otherwise have been sacrificed. There are many other similar cases recorded by other writers in this country, which show that the strong prejudice against the induction of premature labour entertained by most continental authors is not well founded, and that the unfavourable judgment pronounced upon it by the French Academy, in 1827, is erroneous, and ought to be reversed.

In the cases which follow, the advantage of inducing premature labour was not less striking, although the degree of distortion was so great that a child even of seven months could not be born alive. The greater number of the best

practical writers on midwifery in this country have considered the induction of premature labour applicable only to cases of slighter distortion, and have considered it improper in first pregnancies, and before seven complete months of utero-gestation have elapsed. Little has been said by them respecting the safety and utility of the operation in cases of great distortion, to obviate the danger to the mother of fatal contusion or laceration of the uterus and vagina, which are always to be dreaded when much force is required after perforation to extract the head of the child.

“If the pelvis be so far reduced in its dimensions,” observes Dr. Denman, “as not to allow the head of a child of such a size as to give hope of its living to pass through it, the operation cannot be attended with success. It is in those cases only in which there is a reduction of the dimensions of the pelvis to a certain degree, and not beyond that degree, that this operation ought to be proposed or can succeed.”

As the primary object is to preserve the life of the child, Dr. Merriman thinks the operation should never be performed till seven complete months of utero-gestation have elapsed.

As early as 1769, it was proposed by Dr. Cooper to induce abortion in cases of extreme distortion of the pelvis. “Before I conclude,” he remarks, in his *History of a Fatal Case of Cæsarian Section*, “allow me to propose the following question—viz, ‘In such cases where it is certainly known that a mature child cannot possibly be delivered in the ordinary way alive, would it not be consistent with reason and conscience, for the preservation of the mother, as soon as it conveniently can be done, by artificial means to attempt to produce an abortion?’”

(CASE 7.) On Tuesday, 9th Jan. 1838, Mr. Robertson, of Albemarle-street, requested me to see a woman whose pelvis and extremities were greatly distorted by rickets, and who was in the seventh month of her first pregnancy. From an examination of the pelvis, we thought the short diameter of the brim was considerably under three inches, and that a child at the full period could not pass through it without having the volume reduced by craniotomy, and that the operation would be attended with difficulty and danger. We resolved, in consequence, to induce premature labour, though it was the first pregnancy, and though a rule had been laid down by the most judicious writers, that the practice should

never be adopted till experience had decidedly proved that the mother was incapable of bearing a full-grown child alive. The os uteri was situated high up and directed backward, but I experienced no difficulty in introducing the stiletted catheter, and perforating the membranes. The liquor amnii began to escape immediately after, and continued to flow for three days; and labour-pains then came on. For forty-eight hours they were feeble and irregular. Mr. Robertson then found the os uteri considerably dilated, and a foot of the child protruding through it. He extracted the trunk and extremities without difficulty; but he could not succeed in drawing the head through the brim into the cavity of the pelvis. I passed the point of the perforator up to the back part of the head without difficulty, and having made a large opening through the integuments and skull, the brain began to escape. The point of the crotchet was then introduced into the opening, and fixed upon the base: and by drawing downwards and backwards with the crotchet, and at the same time pulling upon the body of the child, the head soon passed through the pelvis completely flattened on the sides. The patient recovered without a bad symptom. I had never before induced premature labour in a first pregnancy.

(CASE 8.) On the 17th May, 1839, when the same patient had completed the seventh month of her second pregnancy, I punctured the membranes. The liquor amnii began immediately to escape, and continued to flow the whole of the following day; and in the evening violent labour-pains came on. The nates presented, and Mr. Robertson had no difficulty in extracting the child without perforation of the head. On the 19th, the usual symptoms of ruptured uterus soon appeared, and she died on the 22d. On the 24th, I examined the body with Mr. Robertson, and we found a large rent in the cervix uteri. The pelvis is now at St. George's Hospital, and the following are its dimensions:—The distance from the base of the sacrum to the symphysis pubis measures two inches and one line. The transverse diameter of the brim is five inches and three-quarters. At the outlet a line drawn between the tuberosities of the ischia measures four inches and a half, and another line, from the extremity of the coccyx to the lower edge of the symphysis pubis, three inches and a half. Had premature labour been induced at the end of the fifth month instead of the seventh, it is very probable the unfortunate termination of this case would have been prevented.

(CASE 9.) On the 23d January, 1842, Mr. Kell, of Bridge-street, Westminster, requested me to see, with him and Dr. Hingeston, a woman *æt.* twenty-eight, who was in the seventh month of her first pregnancy, and whose pelvis was greatly distorted by rickets. Some days before, Dr. Hingeston had passed a sound into the uterus and detached the membranes from the lower part, but labour did not take place. I found the *os uteri* high up, and situated close behind the symphysis pubis. No difficulty was experienced in perforating the membranes in the usual manner, and the liquor *amnii* afterwards began to escape, and continued to flow till the evening of the 26th, when strong labour-pains commenced. At six A.M. of the 27th, the *os uteri* was considerably dilated, and the nates were felt presenting. As it was obvious the breech would never pass through the brim, I brought down the lower extremities with the blunt end of the crotchet, and extracted the trunk without difficulty; but I was obliged also to bring down the arms with the blunt hook. I afterwards endeavoured to pass up the perforator to the back part of the head, and open it, but could not succeed in getting the point of the instrument beyond the upper cervical vertebræ. Being afraid of separating these, and detaching the head from the trunk, I gave up the attempt to perforate the back part of the head, and tried to draw the head through the brim of the pelvis with the crotchet, by fixing the point of the instrument over the bones of the face and forehead. After much exertion, continued for nearly two hours, the head was at last extracted, when completely torn to pieces. I believe it would have been impossible in this case to perforate the skull through the roof of the mouth, as has sometimes been done where similar difficulties have presented to perforating the back part of the head. The placenta was soon expelled, and the patient had a perfect and rapid recovery. It is impossible to doubt that the result of this case would have been widely different, had the patient been allowed to go on without interference till the end of the ninth month.

(CASE 10.) The same patient, being five months pregnant, the membranes were punctured on the 2d December, 1844, and the *fœtus* was expelled without any assistance.

(CASE 11.) On the 24th August, 1846, being again five months pregnant, it was resolved to induce premature labour by puncturing the membranes. On withdrawing the instrument a little fluid blood escaped, but no liquor *amnii*. On

the 26th there was a considerable hemorrhage without any symptom of labour. Os uteri beginning to dilate, and a portion of the placenta felt presenting. Uterine contractions subsequently took place, and the whole contents of the uterus were expelled. Recovered.

(CASE 12.) On the 5th December, 1829, the late Mr. Baker, surgeon to the St. James's Parochial Infirmary, requested me to see Mrs. Ryan, æt. twenty-one, who had been in labour thirty-six hours. It was her first child. The head presented, but no part of it had entered the brim of the pelvis. The orifice of the uterus was about half dilated, and its margin was thin and soft. We estimated the short diameter of the brim of the pelvis at less than three inches, and the distance between the tuberosities of the ischia at two and a half. Both upper and lower extremities of this patient were bent from rickets. Four hours elapsed, after the head was perforated, before we succeeded in extracting it with the crotchet, and not till the bones of the cranium were all torn to pieces. A violent attack of uterine inflammation followed, which had nearly proved fatal.

(CASE 13.) On the 30th December, 1830, when this patient was in the eighth month of her second pregnancy, I induced premature labour by puncturing the membranes. The labour was allowed to continue till it was certain the head of the child could not enter the brim of the pelvis. The head was then perforated, and easily extracted with the crotchet. The difference between this and the former operation was very striking.

(CASE 14.) On the 26th April, 1832, when Mrs. R. was in the seventh and half month of her third pregnancy, I induced labour. The feet of the child presented, and the delivery was accomplished without perforation. Child dead.

(CASE 15.) On the 12th July, 1833, I induced labour in this patient at the end of the seventh month. The inferior extremities again presented, and the child was still-born.

(CASE 16.) Mrs. R. again became pregnant, and I brought on labour on the 13th February, 1834, exactly seven months after the last appearance of the catamenia. The presentation was natural, and the child was born alive after a tedious labour. It lived sixteen days, and then died in convulsions. The child was extremely small.

(CASE 17.) Mrs. R. became pregnant a sixth time, and went into the British Lying-in Hospital, at the seventh and

half month, where I perforated the membranes on the 27th December, 1834. The feet presented, and great force was required to extract the head. The recovery was less rapid than after her former deliveries. Mrs. Ryan became pregnant a seventh time, and determined she would not again submit to have premature labour induced, which afterwards fortunately proved to be a wise resolution, for the placenta adhered to the neck of the uterus.

(CASE 18.) On the 23d August, 1836, I again induced labour in this patient at the seventh and half month. Labour-pains came on twenty-four hours after the membranes were perforated, and the lower extremities of the child presented; and the child was extracted dead, with the head bruised and flattened on the sides. Mr. Gaskoin and Mr. Stutter were present.

(CASE 19.) On the 30th August, 1837, Mrs. R. being at the end of the seventh month of pregnancy, I perforated the membranes with great ease, and labour followed the same evening. The feet presented, and the trunk and head of the child were much contused before Mr. W. Highmore, who had the charge of the case on this occasion, could extract the child. The labour-pains came on immediately after the membranes were punctured.

(CASE 20.) Mrs. R. again became pregnant about the end of December, 1837. "On the 17th January, the catamenia not having appeared, she began taking *secale cornutum* for the purpose of producing the expulsion of the ovum." She began by taking twelve grains four times a-day in infusion. This having produced no effect in six days, the dose was increased to fifteen grains four times a-day. In six days more this was increased to a scruple four times a-day. In six days more this was increased to twenty-five grains without any effect. The dose was then increased to half a drachm four times a-day. Mrs. R. then left off the ergot for one week; when she again resumed it she took one-drachm doses four times a-day for four days, and this having produced no effect whatever, she left off taking it altogether. Mrs. R. therefore took seven ounces of the ergot of rye, which was all procured at Butler's, Covent Garden. Labour not having followed, I perforated the membranes on the 25th July, 1838. The pains soon after came on, and the labour was completed in thirty-seven hours. The child was dead, and its head and face were of a dark colour, and much swollen. Dr.

Zettwah and Mr. E. H. Hills, St. George's Hospital, were present.

(CASE 21.) Mrs. R. menstruated on the 3d November, 1839, and a few days after had the usual symptoms of pregnancy. With Mr. Braybrooke, on the 17th May, 1840, I induced premature labour, and in doing this reached the posterior lip of the os uteri much more readily with the fore and middle fingers of the left hand than with the forefinger of the right to pass the catheter into the uterus. Labour came on in twenty-four hours, and a dead child of six months was easily expelled, and she recovered as usual.

(CASE 22.) On the 16th January, 1842, with Dr. John Hunter and Mr. Daniell, I again brought on labour in this patient, when she had scarcely reached the end of the seventh month. On this occasion I tried the effect of detaching the membranes from the lower part of the uterus, but it was unsuccessful. On the 19th I opened the membranes, and the liquor amnii immediately began to escape freely. Labour came on after a dose of castor-oil on the 23d, and the funis came down before the head, and had ceased to pulsate some time before the child was born.

(CASE 23.) On the 24th November, 1842, Mrs. R. being again about six months pregnant, I introduced a piece of sponge into the os uteri, which gave pain, but did not excite uterine contractions. In twenty hours it was withdrawn, and on the 8th of November the membranes were punctured in the usual manner, and with great ease. Labour came on the following morning, and the child was expelled alive, but lived only a few minutes. I took the child to my class at St. George's Hospital, and removed the lungs, which sunk like lead to the bottom of water, though the child had both breathed and cried, if the report given to me was correct.

(CASE 24.) The same patient being seven months pregnant, I punctured the membranes on the 24th July, 1845. Labour came on in forty-four hours. The feet presented, and the child was extracted alive, but soon died. Mr. Cross was present.

(CASE 25.) Mrs. R. being again in the seventh month, I perforated the membranes on the 17th July, 1847, with a nearly similar result. Mr. Fuller was in attendance on this last occasion, and the patient has recovered most favourably.

(CASE 26.) On the 3d July, 1828, I was requested by Mrs. Phillips to deliver Mrs. Rodwell, a little deformed

woman, twenty-six years of age, residing at No 21, Princes-street, Drury-lane, who had been in labour with her first child upwards of twenty hours. The umbilical cord was hanging out of the external parts, and did not pulsate. The right foot was in the vagina, and the head over the brim of the pelvis, and so firmly fixed in that situation, that by no force which I could exert upon the left leg could the nates be brought into the pelvis. The pains were feeble, and the orifice of the uterus but partially dilated. The outlet, cavity, and brim of the pelvis were all very much distorted. Finding it to be impossible to bring down the breech of the child, or press back the head, I performed the operation of craniotomy, and it was not till the greater portion of the bones of the cranium had been removed with the crotchet, that I succeeded in dragging down the trunk and superior extremities of the child. When this was done, the crotchet was passed up, and its point fixed on the base of the skull, and the head drawn into the cavity and through the outlet of the pelvis. Dr. Stephen Hall was present at the delivery, which lasted from ten at night till two o'clock in the morning. The tuberosities of the ischia were not more than an inch and a half asunder, and the distance from the promontory of the sacrum to the symphysis pubis was under three inches. This patient had a severe attack of uterine inflammation after delivery, which required copious venesection. In ten days she had nearly recovered her usual state of health.

(CASE 27.) In 1829, about fifteen months after this, Mrs. Rodwell being in the seventh and half month of her second pregnancy, I brought on labour by detaching the membranes with a bougie from the lower part of the uterus. Labour came on sixty hours after this separation had been made. The head of the child presented, but it could not be pressed through the brim of the pelvis, though she was left forty-eight hours in labour. The head was easily extracted with the crotchet after perforation, and she speedily recovered.

(CASE 28.) In 1830, the same patient had premature labour induced a second time at the seventh and half month of her third pregnancy. A superior extremity presented, and the operation of turning was performed with great difficulty. After the child had been turned, the head could not be brought through the brim of the pelvis till perforated in the back part, and strong traction employed with the crotchet.

(CASE 29.) I induced premature labour a third time, in

1831, when Mrs. Rodwell was at the seventh and half month of her next pregnancy. The nates presented, and after the trunk and extremities of the child had been extracted, the head could not be drawn through the brim of the pelvis, without the operation of craniotomy. This was performed with the perforator and crotchet, as in her first labour.

(CASE 30.) On the 5th October, 1832, Mrs. Rodwell being in the seventh and half month of her fifth pregnancy, I passed up an elastic catheter into the uterus, and detached the membranes all round from the cervix. No pains having been felt three days after, I separated the membranes still more extensively. This was followed by a considerable hemorrhage from the uterus for several hours, but no labour-pains. The following day she appeared much exhausted, but there were no labour-pains. I then perforated the membranes, and the liquor amnii began to escape, and labour-pains came on soon after. In the evening the pains were strong, the os uteri was widely dilated, and the nates presented. The labour was allowed to continue for several hours, till it became certain the nates would not pass without assistance, and they were then extracted, and also the trunk and superior extremities. The head, however, would not follow. I pulled strongly upon the neck. The perforator and crotchet were employed, and the delivery was at last effected, but death took place five days after, from uterine phlebitis.

(CASE 31.) On the 17th January, 1830, I was called, by the late Mrs. Dobson, to deliver Mrs. Jarvis, æt. thirty, residing at No. 6, Gough-street, Clerkenwell, who had been forty-eight hours in labour. The pelvis was greatly distorted, the whole head of the child above the brim, and the os uteri not more than half dilated. The pains had nearly ceased, and she was quite exhausted. The perforator was conducted to the head, along the inside of the fore and middle fingers of the left hand, and with these the os uteri was protected from injury, while the opening was being made. The crotchet was then introduced through the opening within the head, and the brain broken down, and a quantity of it discharged. I found it impossible to lay hold of any part of the head with the craniotomy forceps, from the distorted state of the pelvis and undilated state of the os uteri. More than three hours elapsed before I succeeded in dragging the head with the crotchet into the cavity of the pelvis, and not until the point of the instrument was passed up and fixed on

the outside of the head behind the jaw. The bones of the upper part of the head were all torn to pieces, and the fingers of my left hand much injured, before the delivery was effected. The placenta came away in half an hour, and the patient recovered as if the labour had been natural. Mrs. Jarvis was a native of Manchester, and when young had spent several years in one of the cotton manufactories of that town. She married at twenty, and had given birth to three living children at the full period, without assistance. During the fourth pregnancy, she suffered much from pains about the sacrum and ilia, and became unable to walk.

(CASE 32.) On the 11th July, 1832, I was requested, by the late Mr. John Prout, surgeon to the British Lying-in Hospital, to see Mrs. Jarvis, who had again become pregnant, and was in labour at the full period. Labour commenced at two o'clock in the morning of the 11th July, when the liquor amnii was discharged. In the evening Mr. Prout saw her for Dr. Golding, and from the distorted state of the pelvis, he found it impossible to reach the os uteri with the finger, and thought delivery could never be accomplished but by the Cæsarian operation. At eleven o'clock at night I saw her with Mr. Prout, but the os uteri could not be touched with the finger, and the nature of the presentation could not be ascertained. The pains being weak and irregular, and there being no reason for immediate interference, we resolved to leave her without assistance during the night, hoping that the orifice of the uterus and presenting part of the child would come into a more favourable situation. At eight A.M., 12th July, we found that there had been strong pains during the night, but neither the orifice of the uterus nor presentation could be felt. In the course of the day Dr. Golding saw her with us, and it was then ascertained that the orifice of the uterus was considerably dilated, and that the head of the child presented. The head was immediately perforated, and the brain destroyed. Fourteen hours after, when the bones of the head had been a little squeezed into the brim of the pelvis, Dr. Golding passed up the crotchet between the uterus and head, and fixing its point in one of the orbits, succeeded in dragging the head through the pelvis. She recovered as favourably as she had done in 1830. She did not suffer from pains about the pelvis after this time, and was able to walk about. There was no distortion of the lower extremities or of any other part of the body.

(CASE 33.) In the month of June, 1833, when the same patient was near the end of the fifth month of pregnancy, I attempted to induce abortion by perforating the membranes with a slender silver catheter. The first attempt was unsuccessful from the firmness of the membranes, but the second trial, made a week after, was speedily followed by the escape of the liquor amnii, and in eight days by the expulsion of the embryo without artificial assistance.

(CASE 34.) On the 12th of February, 1835, I induced premature labour in the same patient at the commencement of the seventh month of pregnancy. Thirty-two ounces of liquor amnii flowed through the silver catheter with which I punctured the membranes. The fœtus was expelled without artificial assistance, but its head was squeezed so as to be quite flat on the sides. Mr. Williams, of Calthorpe-street, and Mr. Rumsey, of Beaconsfield, were present.

I may here remark, that in no case of distortion, however great, can it be necessary to induce premature labour before the end of the fifth month of pregnancy, when the fœtus is so small and soft that it can be easily extracted. The length of the cervix uteri before this period must render it both dangerous and difficult.

(CASE 35.) On the 19th of January, 1836, when the same patient was at the end of the sixth month of pregnancy, I endeavoured to induce premature labour by puncturing the membranes. The os uteri was, however, so high up, that I could not reach it with the point of the finger, or introduce the catheter so as to perforate the membranes. On the 12th of February, I renewed the attempt, but again failed, and partly in consequence of the forefinger of my left hand being still nearly deprived of sensation and the power of motion, from a dissection wound, followed by deep-seated inflammation of the joints. I resolved to try the effects of ergot of rye, and gave five grains every four hours for several days. On the 18th, Jarvis informed me that she had felt pains in the back, and down the thighs, for about ten minutes after taking each powder of ergot, but that no other effect had been produced by them. The ergot was continued every three hours during the day till the 23d, when pains like those of labour came on, but they gradually ceased, and the ergot was discontinued in consequence of the sickness and vomiting it produced. On the 28th, the ergot was again tried, but as it produced nothing but violent sickness, she

refused to continue its use any longer. On the 14th of March, another attempt was made to perforate the membranes with the instrument invented by Mr. Holmes, for the induction of premature labour; but this was also unsuccessful, in consequence of the instrument not being sufficiently curved. On Thursday, the 24th of March, I passed up into the uterus a stiletted silver catheter, with a probe point, and much bent, which had been made for the purpose, and with this the membranes were easily perforated. The liquor amnii immediately after began to escape, and labour-pains commenced the following day. Friday, 25th, the pains continued, feeble and irregular during the Saturday, Sunday, and Monday, and on the Tuesday, they become strong and regular. At six o'clock in the morning of Wednesday, the os uteri was thick and unyielding, above the brim of the pelvis and very little dilated. The presentation could not be ascertained. The pains continued strong and regular. Mr. Simpson, of Gray's Inn-lane, took eight ounces of blood from the arm, and gave forty drops of laudanum. At this time I feared that it would be necessary to have recourse to the Cæsarian operation, to prevent her from dying undelivered. At four P.M., the pains continued, the os uteri was much more dilated, and I ascertained that the nates presented. I immediately resolved to attempt delivery, by passing the crotchet through the anus, completely within the pelvis of the fœtus, fixing it upon the bones, and extracting. This succeeded, and the pelvis and lower extremities were delivered without much difficulty, and a strong tape was passed around the body of the child. The abdominal and thoracic viscera were then drawn out with the crotchet, and the upper extremities brought down. The fore and middle fingers of the left hand were then slid along the back of the child, and pressed forward till they touched the occiput. The perforator was then passed up to the occiput, and a free opening made in it. The crotchet was next passed up, and its point forced through the opening, fixed on the base of the skull, and strong traction made for some time. At last I succeeded in extracting the head, with the bones all crushed together. After this severe and tedious operation, she was left in a very exhausted state, and died the following day, with vomiting and other symptoms of ruptured uterus. On examining the body after death, we found the muscular coat of the anterior part of the neck of the uterus lacerated. The

pelvis was removed, and is now in the Museum of St. George's Hospital. Its brim, cavity, and outlet, are all much distorted. The last lumbar vertebra occupies the usual situation of the base of the sacrum, which is pressed down into the cavity; the bones of the pubis have been forced together so as nearly to touch each other, and give to the brim of the pelvis a cordiform shape. On the left side, a line drawn from the middle of the last lumbar vertebra to the ilium behind the acetabulum, measures one inch and a half. On the right side, a corresponding line measures only an inch and a quarter. From the middle of the last lumbar vertebra to the bones of the pubis, the distance is an inch and three-quarters. At the outlet, the tuberosities of the ischia are only three or four lines asunder, and the arch of the pubis does not exist. The lower extremity of the sacrum and coccyx pass horizontally forward, so that the apex of the latter bone is only two inches and three lines from the point where the tuberosities of the ischia nearly meet. This is the only case of distortion from malacosteon that I have met with in practice, and the softening was entirely confined to the bones of the pelvis. In reflecting on this case, I regret extremely that I placed the slightest dependence on the ergot of rye, and that I had not taken means to insure the perforation of the membranes at an earlier period, which would have prevented all the evil consequences that followed.

(CASE 36.) On the 30th of August, 1836, I was requested by Mr. Wise, of Wardour-street, to deliver a woman twenty-four years of age, residing in Princes-court, Newport-market, the bones of whose pelvis and lower extremities were much distorted with rickets. She was at the full period of her first pregnancy, and had been in labour many hours. The cord was hanging out of the external parts without pulsation. The head was entirely above the brim of the pelvis, and the os uteri was about half dilated, and its edge thin and soft. As the sacro-pubic diameter did not exceed two inches, and the outlet of the pelvis was also much contracted, I immediately perforated the head. The crotchet was then employed to extract the head, but after a time it was laid aside, in consequence of the bones being torn extensively, and the impossibility of fixing its point on any part of the inside of the skull, so as to obtain a secure hold. With the craniotomy forceps I laid hold of one of the parietal bones and the integuments covering it, but in a short time these came away,

leaving the greater part of the head still above the brim. The forceps was reapplied ; but though I exerted my whole force in dragging down the head, it would not pass, and I began to fear that I should not succeed in completing the delivery. By introducing all the fingers of my left hand into the vagina as far up as possible, and directing the forefinger on the outside of the head, I was able to feel one of the eyes ; I passed the point of the crotchet into this orbit, and getting the fore and middle fingers of the left hand on the inside of the skull, with this hold I soon drew the head into the cavity of the pelvis. The head would probably never have been extracted in this case with the crotchet, had not its point been carried up on the outside and fixed in the orbit.

(CASE 37.) On the 1st of October, 1837, the same operation was performed upon this patient when seven months pregnant, but the head would not pass till it was perforated, which was easily done. A second time premature labour was induced with the same results. The same patient became pregnant again, and was in labour at the full period on the 21st of May, 1840. I perforated and delivered with much less difficulty than in the first labour, the crotchet being carried up and fixed on the outside of the head as soon as the brain was removed and the cranial bones had collapsed. Recovered.

(CASE 38.) On the 16th of April, 1841, I induced premature labour in a patient of Dr. N. Grant's, 10, Paddington-street, who was in the seventh and half month. The pelvis was small, but not distorted. She had twice before been delivered artificially of still-born children, and on this occasion the child was also expelled dead. She had suffered from chorea after one of her confinements, and has since died from disease unconnected with the uterus.

In the following cases of pregnancy with malignant disease, and fibrous tumours of the uterus, ovarian cysts, organic and nervous affections of the heart, dropsy of the amnion, hemorrhage from the bowels, and obstinate vomiting, the induction of premature labour was, or might have been employed, with advantage.

(CASE 39.) On the 1st of May, 1840, Mr. Cross, of Leicester-square, requested me to see Mrs. Ayesbury, æt. forty-one, who had been twenty-four hours in labour. The os uteri was hard, irregular, and ulcerated, and so little dilated,

that the presentation could not be ascertained. The symptoms of malignant disease of the uterus had commenced two years before, and the pain and discharge became aggravated when conception took place. The labour-pains continued strong and regular the whole afternoon and night of the 1st of May. At seven A.M. of the 2d, the pains were violent and incessant, with restlessness and sickness at stomach. The os uteri continued precisely in the same condition, and the presenting part could not be felt. Twenty-five ounces of blood were drawn from the arm, and one drachm of laudanum administered. At eleven P.M., the pains still continuing violent, with severe rigors, rapid pulse, and incoherence, another effort was made to reach the presenting part, though the os uteri was still undilated. Having succeeded in touching the head, the perforator was passed up along the finger, the skull opened, and the brain destroyed. The propriety of making incisions into the diseased os uteri had been considered, before the head could be opened, but the idea was abandoned, after consulting an eminent surgeon. At six A.M., May 3d, the labour-pains having continued strong and regular during the night, the os uteri opened sufficiently to allow the crotchet to be introduced and the head extracted. The placenta soon followed the child, but she continued gradually to sink, and died on the 4th May. The body was examined by Mr. Cross, and the neck of the uterus, extensively lacerated, presented the appearance of an irregular dark-coloured, disorganised mass. The danger of dying undelivered, and the injury necessarily inflicted upon the uterus, by the extraction of the child, would have been both avoided or lessened in this case, by the induction of premature labour.

(CASE 40.) Several years ago, a woman with malignant disease of the os uteri, and who was three or four months pregnant, was admitted into St. George's Hospital. She afterwards went to Margate, but though labour came on at the end of the seventh month, the os uteri did not dilate sufficiently to allow the fœtus to pass, and it was extracted with the vectis. Symptoms of ruptured uterus soon followed. Mr. Price examined the body after death, and sent the uterus to me. The whole orifice and neck of the organ was destroyed by cancerous ulceration, and the anterior part of the cervix was lacerated.

(CASE 41.) In April, 1840, I was requested, by Dr. James

Johnson, to see a patient, who had a malignant fungoid disease of the os uteri. The catamenia had disappeared for several months, and she had morning sickness, and other symptoms, which made her believe that she was pregnant. In May, the abdomen had enlarged, and the sound of the pulsations of the fetal heart and uterine arteries were distinctly heard, and the movements of the fœtus felt with the hand. The areolæ were broad and dark, and the glands around the nipples enlarged. I recommended premature labour to be induced, but she would not consent to the operation. Delivery, however, took place spontaneously on the 14th July, and a dead child of seven months was expelled without artificial assistance. The pain, discharge, and other symptoms of cancer, almost entirely disappeared for several months after her confinement, but they returned, and Mr. Rawbone, King's Road, Chelsea, informed me that she died on the 1st January, 1841.

On relating these cases to Dr. Merriman on the 7th May, he informed me that he had met with three of a similar nature. In one the labour-pains were excruciating, and continued for a long time without producing any effect upon the os uteri, but at last it gave way suddenly, and the head passed through it. The child was born alive. The mother died six weeks after.

On returning home from attending a case of labour, Dr. Merriman was informed by his uncle, the late Dr. S. Merriman, that the patient had a scirrhus of the os uteri, that he thought she would never have another child, and would die from the disease. That, he said, was the result of his experience in other cases. She conceived again, however, and died soon after delivery. The child was born alive, and neither in this nor in the last case was any operation performed.

The history of Dr. Merriman's third case of labour complicated with cancer uteri, is contained in the following letter:—

“My dear Doctor Lee,—The following case which I did not recollect last night, will interest you ; I do not remember any one very similar.

“August 12th, 1824, I was desired by my excellent friend, Mr. Clifton, of Leicester-place, to visit Mrs. George, whose husband kept the Coach and Horses public-house in Comp-

ton-street, Soho. She told me that she had been long ill, and had consulted Dr. Bree, who thought her disease was ulcer of the womb, and treated her accordingly ; she said, however, she was quite sure of being pregnant, and not liking to continue a mode of treatment which she imagined must be improper had ceased to consult him.

“ On making inquiry into her symptoms, it appeared that Dr. Bree was justified in taking the view he did of her complaint : they were, extreme pain in the back, constipation, emaciation, and especially extremely offensive discharges from the vagina. These symptoms had occurred after a lying-in, two years before, and had continued ever since : indeed, there was some reason to believe that they had shown themselves before the termination of that pregnancy. Upon this point, however, the evidence was not quite satisfactory.

“ Having learned thus much, I inquired what were her reasons for thinking herself pregnant ; her reply was, that she distinctly felt the motions of the child. As no examination per vaginam had been instituted, I obtained permission to pass my finger, and was not a little surprised to find that the os uteri and part of the cervix were entirely destroyed by a species of *ulcus exedens*, yet that the body of the uterus was enlarged to the size it usually attains between the fifth and sixth month, and that it contained a living *fœtus* : so that this was a case of pregnancy in a uterus deprived by disease of a large portion of its substance. Whether the os uteri had taken on disease before the pregnancy commenced must remain uncertain ; but at the time of my examination, which was made with as much care and exactness as was in my power, the whole of the os uteri, and a large portion of the cervix, were literally eaten away by ulceration.

“ On conferring with Mr. Clifton, who accompanied me, on the treatment to be adopted, I expressed an opinion that the *fœtus* could not be much longer retained, for the distention of the uterus was already beginning to intrench upon the cervix ; and as the distention proceeded, the ulcerated cervix would be pressed upon, and must necessarily give way, and the *fœtus* be expelled ; accordingly, on the 31st August, the *fœtus* and placenta passed into the world, almost without pain : the child, of about six months' gestation, was born alive, and lived a few hours. The poor woman, who now

began to entertain hopes of recovery, was not at all benefited by the delivery, but continued to live in a state of great suffering, sometimes mitigated by narcotics, till the month of February, when death gave her a happy release.

“ Believe me, dear Sir,

“ Yours with great truth,

“ SAMUEL MERRIMAN.

“ Brook Street, Grosvenor Square,

“ May 8th, 1840.”

In Dr. F. Ramsbotham's first case the labour was premature, and the child was easily expelled. The woman died two weeks after. The second woman died undelivered.

Dr. Henry Davies has related to me a case of labour at the full period with cancer, in which the uterus was ruptured, and death speedily followed delivery.

In 1770, Dr. Denman saw a case of malignant fungoid tumour of the os uteri, with pregnancy, at the end of the ninth month. The operation of embryotomy was performed, but the patient died before the child could be extracted. He states that smaller tumours of the same character are not unfrequently met with in practice, and that little effect is produced by the labour-pains for a long period, but that all at once the rigid os uteri yields and dilates speedily and unexpectedly, or perhaps, in some instances, is lacerated. In some cases, also, he states that the excrescences are of so tender a structure that they are crushed by the passage of the head over them, and entirely destroyed.

If abortion does not take place where pregnancy exists, with cancer of the os uteri in an advanced stage, the membranes of the ovum should be perforated if possible, and at the seventh and half month if the disease is less extensive.

(CASE 42.) On Sunday, the 8th December, 1845, Thomas Porter, Esq., 32, Euston-square, called upon me, and stated that he had a case of uterine hemorrhage in the eighth month of pregnancy, and that he was afraid the placenta was presenting. Being in attendance on a lady in labour, I was unable to leave my patient, and Mr. Porter said there was no necessity for an immediate consultation, as the hemorrhage had greatly abated. He returned after some time, and told me, that as it had wholly ceased, I need not see the case till he sent for me. Monday morning, at eleven o'clock, Mr. Porter sent to request me to go immediately to Howland-

street, to Mrs. M——. On examining I found the vagina full of blood, and, as I imagined, a portion of the placenta slightly protruding through the os uteri. I resolved to deliver immediately by turning the child, and took off my coat, laid bare the arm, and passed the hand slowly through the external parts into the vagina. To my astonishment, I then felt that it was not the placenta, but a great soft fungoid tumour growing from the entire circumference of the os uteri, and that the cervix was in an indurated state. On the 11th Dr. Merriman saw the case, and advised the membranes to be ruptured, but it was found impossible to introduce the stiletted catheter or any other instrument, through the diseased os and cervix uteri. The sound of the fetal heart was not heard, and there was no positive proof that the fœtus was alive. "If you were sure of bringing the child alive," said Dr. Merriman, "I think you would be justified in performing the Cæsarian section, but not otherwise." On the 14th there was a great discharge. Vomiting took place, and she died in the afternoon, no attempt having been made by the uterus to expel the fœtus, which was found, on dissection, to be in a putrid state. The os and cervix uteri were both extensively disorganised by cancer.

(CASE 43.) A woman, æt. thirty, in the fifth month of her first pregnancy, began to suffer from sickness, fever, and constant pain and distention of the abdomen. On examination, it was easily perceived that the gravid uterus was pressed to the left side by a hard, painful, lobulated tumour on the right. This continued rapidly to enlarge, and to become more exquisitely painful, though leeches were applied in great numbers over the tumour, and calomel, antimony, opium, and cathartics, were administered internally. The painful distention of the abdomen soon became so great that it was necessary to obtain relief by inducing premature labour. This was easily done. For a short time after delivery the symptoms were less severe, but the fever, sickness, and painful distention soon returned, and proved fatal. A fibrous tumour, in a state of inflammation and suppuration, was found attached by a large root to the right side of the body at the uterus. The peritoneum, which covered it, adhered to the parietes of the abdomen, omentum, intestines, and liver. Numerous small fibrous tumours, the bloodvessels of which had been injected, were found imbedded in other parts of the parietes of the uterus. These were in a healthy state.

(CASE 44.) On the 6th December, 1840, Dr. Brown requested me to see a case of pregnancy complicated with an ovarian tumour. This tumour had appeared five years before conception took place, and had slowly enlarged. The patient was in the sixth month of her first gestation, and the abdomen was enormously distended, and a fluctuation was perceived on percussion. The difficulty of breathing was so urgent, that it was impossible for her to remain an instant in the horizontal position. We considered it necessary to induce premature labour, but the os uteri was so high up, and directed so much backwards, that great difficulty was experienced in passing the stiletted catheter into the uterus, to perforate the membranes. The anterior lip of the os uteri could only be reached with the tip of the finger. An instrument with a sharp point and a smaller curve than that employed could not have been introduced in this case to evacuate the liquor amnii. On the 7th labour-pains commenced. Venesection and opiates were employed to promote the dilatation of the os uteri. The nates presented, and on the 9th a dead fœtus was expelled. The relief from the delivery was great, though the abdomen continued large, and the fluctuation distinct for several weeks. August 10th, 1841. The ovarian tumour has been considerably reduced in size, since the repeated application of leeches, and the long-continued use of the liquor potassæ. The general health is nearly in the same condition as before pregnancy.

(CASE 45.) Nineteen years ago, with Dr. Merriman, and Dr. John Prout, I examined the body of a woman, æt. thirty, who had died from malignant disease of the right ovary a few days after delivery. In the fourth month she began to suffer from a constant sense of uneasiness in the hypogastrium, and irritability of the stomach. The countenance became sallow, and the constitutional powers greatly reduced. The abdomen not long after began rapidly to enlarge, and before the end of the seventh month it had attained the size it usually acquires at the full period. An enormous cyst, which contained a dark-coloured gelatinous fluid, was found on dissection adhering to the right ovary, and within this cyst were a number of others of different sizes and shades of colour, which, when cut open, presented the true encephaloid or hematomatous fungous character.

(CASE 46.) At two P.M., 9th August, 1844, I was called to a case of protracted labour, at 49, Gray's-inn-lane. I was

informed that there was a tumour in the pelvis obstructing the head—that this tumour had existed several years, and that the patient had twice been delivered with the forceps of living children. I found a large cyst low in the pelvis, and felt convinced that the head would not pass. The os uteri had for some time been fully dilated; the pains were violent, and the head was driven down with great force against the tumour. Mr. ——— was of a contrary opinion, and said that he had employed the forceps successfully in her two former labours. We resolved to wait and see whether the head would come within reach of the forceps. At half-past four, feeling anxious about the result, I returned to the patient's house, and found the uterus ruptured. The pains had become still more frequent and violent; she had complained of severe pain in the situation of the fundus uteri,—the head of the child had wholly receded, and could be distinctly felt through the abdominal parietes. The breathing was hurried; the countenance sunk, and the pulse rapid and feeble. I passed my hand through the vagina and rent in the uterus, grasped the feet of the child and delivered, when the patient was in a faint and dying state. After delivery she rallied considerably, and lived four days. The body was not examined.

(CASE 47.) On the 17th March, 1845, I saw a lady in the third or fourth month of her second pregnancy, whose abdomen was greatly enlarged, and was suffering much from a cyst of the right ovarium. It had first been observed about six weeks after the commencement of her former pregnancy, and had continued to grow till the full period with the gravid uterus. The labour was natural. On this occasion the symptoms were so urgent that I punctured the membranes. Incessant sickness followed the discharge of the liquor amnii, and continued till the fœtus and placenta were expelled, and afterwards gradually subsided. She recovered favourably, and for a considerable period the cyst remained stationary, but subsequently it assumed a more active form, with distinct fluctuation, and now has attained a large size.

(CASE 48.) On the 31st October, 1846, Mr. Ince, of Lower Grosvenor-place, requested me to see a patient, æt. twenty-five, who had been delivered of a living child about two years and a half before, without any unusual occurrence. Her second labour had commenced a considerable number of hours before I saw her, and Mr. Ince had ascertained that the

hollow of the sacrum was filled up with a large tumour, which prevented the head from descending. The pains were strong and regular, and the os uteri widely dilated. It was obvious that there was not room for the head to pass, and that some mischief would ensue if the labour was allowed to continue long. Mr. Ince therefore opened the head and extracted it with the crotchet after much exertion. The tumour had undergone no change some months after. The same patient has again been pregnant, and Mr. Ince and Mr. Meates induced premature labour. After remaining upwards of twenty-four hours in labour, there was no hope of the head passing between the tumour and pelvis, and the delivery was accomplished by the same means.

(CASE 49.) On the evening of the 28th November, 1846, I saw, with Mr. Marshall and Dr. Snow, another case of difficult labour from an ovarian tumour occupying the hollow of the sacrum. The labour had commenced at eleven A.M., when Mr. Marshall examined and could not reach the os uteri. At seven P.M. Dr. Snow saw the patient, and was likewise unable to do so, but soon after he felt it high up behind the symphysis pubis, with the head presenting. At eight o'clock the pains were so violent as to threaten rupture of the uterus, and there was no hope that the head would ever pass by the tumour occupying the hollow of the sacrum. I opened and extracted the head with far less difficulty than I anticipated. For some time after the patient recovered and the tumour could scarcely be felt, but it was afterwards felt above the brim of the pelvis on the right side, and gradually increased. Ascites took place, and she died on the 12th April, 1847. There were ten pints of serum in the sac of the peritoneum, and a large malignant tumour connected with the right ovary. The left ovary was also affected with malignant disease.

(CASE 50.) In the summer of 1847, Mr. Randolph, of Marshall-street, Westminster, called me to see a case of protracted labour at Lambeth, in which the difficulty arose from the presence of a great hard tumour in the pelvis, whether uterine or ovarian was not known. The pains were so violent and incessant that immediate delivery was necessary, but the pelvis was so completely blocked up with the tumour, that when I proceeded to perform the operation of craniotomy, I had great doubt whether the child could be extracted. The difficulty seemed fully as great as in the

dwarf at Chelsea, but the tumour yielded to the pressure, after the head had been opened, and I succeeded in extracting it after upwards of two hours' uninterrupted exertion with the crotchet. The patient recovered without any bad symptom, and is now alive and well. A hard tumour, about the size of a child's head, still fills the pelvis.

(CASE 51.) On the 6th December, 1827, I saw a young woman, near the full period of pregnancy, who had suffered for several years from an organic affection of the heart. The face was livid, the extremities were cold, the pulse rapid and feeble, and the dyspnœa urgent. For three months she had suffered severely from palpitation of the heart, and frequent attacks of violent dyspnœa threatening suffocation. The symptoms were relieved by venesection to twelve ounces, putting the feet and legs in warm water, and giving an anti-spasmodic draught. On the morning of the 7th, she felt much better, but at eight P.M. the difficulty of breathing returned, and she suddenly fell down and expired. The pericardium adhered throughout closely to the heart, and the pleura of the lungs to that of the ribs extensively on both sides. The air-cells on both sides were gorged with bloody mucus, and portions of the lungs on both sides hepatized. The uterus and its contents were healthy.

(CASE 52.) Twelve years ago a patient of the Middlesex Hospital with organic disease of the heart, and who was seven months pregnant, sunk down dead suddenly. I was called to her half an hour after, when the action of the heart had entirely ceased. For several months previously, she had suffered much from violent fits of dyspnœa and palpitation of the heart.

(CASE 53.) On the 11th December, 1838, with Mr. Jorden and Mr. Potter, I examined the body of a woman who had died suddenly the previous day from organic disease of the heart. She was in the ninth month of pregnancy, and the fatal result was unexpected.

(CASE 54.) About two years ago a woman six months pregnant, was admitted into St. George's Hospital, under the care of Dr. Chambers, with expectoration of blood, dyspnœa, and signs of valvular disease of the heart. The symptoms became gradually more urgent, and she died soon after the expulsion of the contents of the uterus. The tricuspid valve was diseased, and the lungs apoplectic.

(CASE 55.) At midnight, September 14th, 1832, Mr. Har-

vey, of Great Queen-street, requested me to see a patient with him in labour, who had the most distressing dyspnœa. She was held up at an open window, and was gasping for breath. The face was livid, the extremities cold, and œdematous. The os uteri was fully dilated, and the head had partially entered the brim of the pelvis. The pains had ceased. Mr. Harvey informed me that she had some valvular disease of the heart, and that dropsical symptoms appeared soon after she became pregnant. When labour came on, there was much difficulty of breathing experienced when she attempted to lie down, and as the first stage of labour proceeded, the dyspnœa increased, and became so severe that she seemed in danger of dying from immediate asphyxia. It was evident that she could not have long survived without being delivered, and that she had no power to expel the child. If the head had descended lower into the pelvis, it would have then been impossible to deliver her with the forceps, while held up by her friends before an open window. I opened the head, and extracted it with the craniotomy forceps. The alarming difficulty of breathing gradually subsided, and she was alive a year after, and in her usual state of health. In the foregoing cases, premature labour might have been induced with advantage.

(CASE 56.) On the 19th December, 1841, Dr. Harrison requested me to see a patient in the St. Marylebone Infirmary, who was dying, in the eighth month of pregnancy, from tubercular disease of the lungs and organic disease of the heart. The difficulty of breathing, and the feeble state of the pulse and other symptoms, rendered it probable that she would not live twenty-four hours. The sound of the fetal heart could not be heard. I considered that it would be wrong to interfere in any way with a dying person, and where there was every reason to believe that the child was already dead. A month or two before, the induction of premature labour might have been had recourse to. It would have been a barbarous act to have performed the Cæsarian operation upon this patient at the time I saw her. She died during the night, and while sinking, the fœtus, in a putrid state, was expelled.

(CASE 57.) On the 17th June, 1843, Mr. Rawbone, of King's-road, Chelsea, requested me to see a lady, six months pregnant, who had œdema of the lower extremities, dyspnœa, and strong pulsation of the heart. Pulse 120. Tongue loaded,

great sickness, and scanty urine. The urgent symptoms were partially relieved by the treatment, and she was delivered in the eighth month, but died soon after. There was much hemorrhage during the labour.

(CASE 58.) Mr. Humby requested me, on the 7th of May, 1845, to see a patient under his care, in an advanced stage of pregnancy, who had an organic disease of the heart. There was urgent dyspnœa, the pulse was small and frequent, the lips livid, the legs and thighs greatly swollen. There was violent pulsation of the heart, felt over a great part of the chest, and danger of suffocation on attempting to lie down. Drs. Blundell and Billing had seen the patient, but their treatment had not relieved the symptoms. I had no difficulty in puncturing the membranes. The fœtus and placenta were expelled the following morning, and death took place at five in the afternoon. Mr. Humby found the left ventricle hypertrophied, the right auricle much dilated, and the mitral valve thickened. The induction of premature labour at an earlier period might perhaps have prolonged the patient's existence.

(CASE 59.) A young married lady, in the fifth month of her first pregnancy, who had previously been in good health, began to suffer from violent irregular action of the heart, aorta, and carotid arteries. Several eminent physicians were consulted, who believed, from the violence of the symptoms, that aneurism of the arch of the aorta existed. As pregnancy advanced, the patient became worse, and an unsuccessful attempt was made by an experienced accoucheur to induce premature labour. All who saw the case admitted that this was necessary, and the only means which could preserve her life; bloodletting, digitalis, and all other remedies having failed to afford relief. She continued to suffer so much during the last three months of pregnancy, that it was feared some unfortunate accident would occur during her delivery. Considerable œdema of the face, legs, and arms took place several weeks before the full period, with partial relief of the internal affection. The labour took place in July, 1833, and was perfectly natural. The palpitation of the heart gradually disappeared.

(CASE 60.) 3d September, 1827, Madame Bassi, æt. thirty, in the seventh and half month of pregnancy. During the last six weeks she has been suffering from constant severe pain of the abdomen, which has been rapidly enlarging

during the last fourteen days, and is now greatly distended. The lower extremities are œdematous, the respiration is impeded, and there is urgent thirst and pyrexia. The movements of the fœtus have been unusually languid; bloodletting, and cathartics, and diuretics, were employed without relief: the dyspnœa and swelling of the abdomen continued to increase until the 10th, when uterine contractions came on, and a quantity of liquor amnii escaped, which the midwife represented as sufficient to fill all the empty vessels in the house. A fœtus was afterwards expelled which showed no signs of life. Its abdomen contained one pound of serum, which was examined by Dr. Prout, and found to be albuminous, and closely resembling that of dropsy. The mesenteric glands were enlarged. The liver was of the natural size, but of a dark leaden colour, and of the consistence of coagulated blood. The spleen was larger and softer than natural. The peritoneum was highly vascular, and in several parts ecchymosed. The pericardium and general cavities of the thorax contained a considerable quantity of serous fluid. The lungs on the right side were healthy, and the left superior lobe; but the inferior had undergone a singular change, being converted into a mass of vesicles like hydatids, containing fluid, and enveloped by the pleura, which was very vascular. The placenta and membranes were not examined.

(CASE 61.) Mrs. Lewis, æt. twenty, was delivered, June 27th, 1828, of a still-born child, in the eighth month. The quantity of liquor amnii was excessive. The abdomen of the fœtus contained half a pound of a straw-coloured serum. The peritoneum was highly vascular. The liver was of the usual size, but of unnatural density. By the patient's account, her first child was also born prematurely, in a putrid state, and she attributed both these accidents to a syphilitic taint contracted from her husband.

(CASE 62.) 31st August, 1828, Catharine Netly, æt. thirty-seven, No. 415, Strand. About six weeks ago, while in the seventh month of pregnancy, she began to experience a sense of constant dull pain in the region of the uterus, and soon after perceived the abdomen to enlarge with unusual rapidity. The lower extremities became œdematous, the urine was secreted in sparing quantity, and the respiration difficult when in the recumbent position. The movements of the child were remarkably languid. All these symptoms

having become more severe, and the abdomen greatly enlarged, labour-pains commenced last night, and about five quarts of liquor amnii escaped, and soon after a dead and putrid fœtus. I examined the fœtus and its involucri with the greatest care, but could discover no appearance of vessels in the amnion, or lymph effused on its fetal surface. The chorion was also in a perfectly healthy condition; the placenta was of the natural size, but its whole mass was unusually soft in texture, and a considerable portion of it was in an apoplectic state.

(CASE 63.) Mrs. Bryant, æt. thirty-four, No. 3, New Church-court, Strand, the 30th of August, 1828. Though she is only in the seventh month of her pregnancy, the abdomen is larger than it commonly is at the full period of gestation. The lower extremities are œdematous; she suffers much from constant severe pain in the hypogastrium, dyspnœa, and cough; the countenance is pale and anxious; the pulse quick; and there is urgent thirst, with scanty secretion of urine. These symptoms have been experienced during the last three months; but the unusual enlargement of the abdomen was not perceived till the beginning of the seventh month of pregnancy, since which time it has been rapidly increasing. From the period of quickening, the movements of the fœtus have been very feeble. An obscure fluctuation was felt in the abdomen. On examining per vaginam, the os uteri was closed, but the cervix uteri was obliterated, as in the ninth month of pregnancy, and the presence of a large quantity of fluid could readily be detected in the uterus. The ballottement of the fœtus was very distinct. Bloodletting, diuretics, &c., were employed without relief. The difficulty of respiration became greatly aggravated, the abdomen still more distended, and the urine secreted in smaller quantity during the succeeding two weeks, and on the 21st October, when the dyspnœa threatened suffocation, I ruptured the membranes, though there was no sign of approaching labour, and ten pints of liquor amnii were discharged. On the following day uterine contractions came on, and a living child was born, which has been reared. The placenta and fetal membranes, though minutely examined, presented no trace of disease. The mother continued to suffer from dyspnœa, and anasarca of the lower extremities for several weeks, but ultimately recovered. An obscure fluctuation in the abdomen was perceptible for some time after delivery.

(CASE 64.) A lady, thirty years of age, was delivered of a feeble child, at the seventh and half month. The liquor amnii amounted to six pints, and the unusual swelling of abdomen subsided after its escape. The peritoneal sac of the child contained four ounces of serum, and the whole cellular membrane of the body was greatly distended with fluid. The pleura covering the lungs on both sides was studded with small tubercles, and also the surface of the liver and spleen. The placenta was three times the common size, and a considerable portion of its structure was converted into a soft yellow matter, like fat.

(CASE 65.) At nine, P.M., on the 21st September, 1839, Mr. Young, of Piccadilly, requested me to see a patient in the seventh month of pregnancy, with dropsy of the amnion. The abdomen was so enormously distended, that she could not for an instant assume the horizontal position. Fluctuation was distinctly perceived, as in cases of ascites. The cervix uteri was obliterated, and the movements of the child in the liquor amnii felt. The abdomen had begun suddenly to enlarge three weeks before, and urgent dyspnœa soon followed. From the lividity of the countenance, the distressing sense of suffocation, and the coldness of the extremities, it could not be doubted that she would speedily sink if not relieved. I passed up the stiletted catheter into the uterus without difficulty, and punctured the membranes at three points. The liquor amnii immediately began to flow profusely, and before the morning ten quarts had escaped, and two premature fœtuses had been expelled without difficulty. She recovered favourably.

(CASE 66.) At three P.M. on the 2d January, 1840, Mr. Hutchinson, of Guildford-street, called me to see a lady four or five months pregnant, affected with dropsy. The abdomen was much swollen, and the face, trunk, and extremities œdematous. The difficulty of breathing was so urgent, that she was supported sitting upon the edge of the bed with the feet resting upon a chair. It was obvious, if the symptoms were not relieved, that she could not live many hours. The symptoms had commenced in the second month of pregnancy, and had increased rapidly during the previous week. Diuretics, blisters, and drastic cathartics had been employed by Dr. Roots and Mr. Hutchinson, without the slightest benefit. On perforating the membranes, an immense quantity of fluid rushed from the uterus, and continued to flow

till the floor of the apartment was deluged. Although the size of the abdomen was reduced, the difficulty of respiration continued, with lividity of the lips, and rapid pulse. Six hours after the discharge of the liquor amnii, the os uteri was dilated to the size of a crown, but there were no labour-pains. The distressing symptoms continued till the afternoon of the 3d, when the fœtus and placenta were expelled without hemorrhage. The power of swallowing was soon after lost, and she died in a few hours. Four pounds of serum were found in the sac of the peritoneum, and three ounces in the pericardium. The heart was sound. The lungs were gorged with serum, and portions were unusually dense, and sank in water. The liver was healthy, the kidneys were harder than natural, the cortical part cutting like hard pork. The corpus luteum presented the usual appearance, both layers of the Graafian vesicle being inclosed within the yellow matter, and this was in immediate contact with the stroma of the ovary which contained it. The amnion was carefully examined, and was without bloodvessels.

(CASE 67.) On the 7th January, 1846, Mr. Thomas requested me to see a patient in the sixth month of pregnancy, who had anasarca of nearly the whole body, with symptoms of dropsy of the amnion, and ascites and hydrothorax. Diuretics had no effect upon the action of the kidneys, and as the dropsy increased, and was attended with great dyspnœa, it was considered necessary to puncture the membranes. A large quantity of liquor amnii escaped, and the child and placenta were expelled, but a considerable period elapsed before the function of the kidneys could be restored, and the dropsical fluid removed from the cellular membrane and internal cavities. Death in all probability would here have taken place in no long time if premature labour had not been induced.

In five of the cases now related, there existed with dropsy of the amnion some malformed or diseased condition of the fœtus or its involucra, which rendered it incapable of supporting life subsequent to birth, and the same circumstance has been observed in most of the cases which have been recorded by the authors alluded to. In two only of the preceding cases was the formation of an excessive quantity of liquor amnii accompanied with inflammatory and dropsical symptoms in the mother; and in none did the amnion, where an opportunity occurred for making an examination,

exhibit those morbid appearances produced by inflammation, which M. Mercier has described, and which led him to infer that inflammation of the amnion is the essential cause of the disease. When unconnected with a dropsical diathesis in the mother, I am disposed to consider it merely as one of the numerous diseases of the fœtus and its appendages which sometimes occur independently of any constitutional disorder in the parents, and with the causes of which we are wholly unacquainted. The diagnosis of dropsy of the amnion is most difficult in the simple form of the disease, where the effusion has taken place to a great extent, and when complicated with ascites. In both these cases, fluctuation more or less distinct can be perceived on percussion of the abdomen, but we can obtain from this sign no positive information, to enable us to determine whether the fluid be contained in the cavity of the peritoneum, amnion, or in both these membranes. In the simple form of dropsy of the amnion, where the quantity of fluid is not excessively great, the fluctuation is obscure, deep-seated, or wholly imperceptible. The presence or absence of fluctuation is, therefore, no certain test of the existence of the disease, and the only mode of arriving at a correct diagnosis, both in its simple and complicated forms, is by instituting an examination per vaginam. By this proceeding we shall not only be able to ascertain the changes in the uterus consequent on impregnation, but the accumulation of a preternatural quantity of fluid in the membranes of the ovum. This latter circumstance is known by the unnatural enlargement of the body of the uterus, by the state of its cervix, which is prematurely obliterated by the ballottement of the fœtus, which is remarkably distinct, and by the sense of fluctuation in the vagina on percussion of the abdomen. In ascites complicated with pregnancy, Scarpa has observed, in his memoir on this subject, published in 1817, that the symptoms are entirely different from those of hydrops amnios. The regular form of the fundus, and body of the pregnant uterus, he states, is not evident to the touch in these cases, from the enormous distention and prominence of the hypochondria, arising from the great quantity of fluid interposed between the fundus and posterior part of the uterus and abdominal viscera. The urine is scanty and lateritious, and the thirst is constant. The abdomen, upon percussion, presents a fluctuation obscure in the hypogastric region and in the flanks, but suffi-

ciently sensible and distinct in the hypochondria, and strong and vibratory in the left hypochondrium, between the edge of the rectus muscle and the margin of the false ribs. These symptoms, with the previous history of the patient, may afford us, in doubtful cases, some assistance in the diagnosis, but our principal dependence must be placed on the information acquired by a careful examination of the state of the cervix and body of the uterus.

Having arrived at a correct diagnosis, the treatment of dropsy of the amnion becomes simple. Our object ought to be, to relieve the urgency of the symptoms occasioned by the over-distention of the abdominal cavity, and the only safe mode of giving this relief is, by puncturing the membranes, and evacuating the superabundant liquor amnii. In four of the cases now related, this was had recourse to with success, and in one the life of the child was preserved. In another, the mother's life would have been saved had this been done at an earlier period. In all the other cases, the spontaneous rupture of the membranes was followed by alleviation of the symptoms, and the birth of a child rendered by disease incapable of supporting life; a further proof that the evacuation of the liquor amnii is attended with beneficial consequences. The artificial rupture of the membranes, if the operation be carefully performed, is not more dangerous than the spontaneous rupture, and if the ease and safety of the mother can be insured, we ought not to be induced to delay its performance by apprehension for the life of the child, since from its diseased state, in the greater number of instances, it will be still-born. The only difficulty that can arise respecting the treatment, is in cases of dropsy of the amnion complicated with ascites. Even here I would recommend the evacuation of the liquor amnii, as the best remedial measure that can be had recourse to, since it relieves the leading symptoms produced by the pressure of the excess of fluid in the peritoneum and amnion on the neighbouring organs, which are the only symptoms necessary to be counteracted. After delivery, the effusion into the peritoneal cavity, if it depend on utero-gestation, will gradually disappear.

(CASE 68.) Mr. Beamen, of King-street, Covent-garden, requested me to see a patient in Lambeth-street, who was in the fourth month of pregnancy, and had suffered for several weeks from incessant vomiting, with pain of epigastrium

and fever. When every kind of treatment had failed, I punctured the membranes of the ovum, and discharged the liquor amnii. The vomiting ceased immediately after, and the fever subsided, though the fœtus was not expelled for several weeks.

(CASE 69.) In October, 1836, Mr. Webster, of Connaught-terrace, called me to see a patient, who was two months pregnant, and who had been attacked with faintness, violent sickness, and headache, soon after conception, and which had been gradually becoming more distressing. There was great emaciation and fever. The tongue was red, and the epigastrium tense and painful on pressure. The symptoms having assumed a very alarming character, and all remedies being useless, we resolved to puncture the ovum, and for this purpose the instrument was introduced into the uterus, but no liquor amnii followed. The vomiting, however, began immediately to subside, and she went to the full period, and was safely delivered of a living child.

(CASE 70.) On the 17th May, 1838, I saw a lady, with Drs. Ramsbotham and Ashwell, in the early period of pregnancy, who had violent vomiting, great tenderness of the epigastrium and right hypochondrium, yellowness of the eyes, thirst, and quick pulse. The emaciation was so great, that had it proceeded much farther, she would probably have become completely exhausted. Had the symptoms not subsided under the use of calomel, the repeated application of leeches to the region of the liver, and very low diet, it would soon have been necessary to induce abortion.

(CASE 71.) A young married lady was attacked with constant sickness and vomiting, at the commencement of the third month of her first pregnancy. It continued, in spite of all remedies, for ten weeks, when she was reduced to a state of the greatest emaciation and debility. When apparently dying, I recommended the induction of premature labour, but her husband and relations would not consent to the operation. For a considerable period, nothing was retained upon the stomach, except a little brandy-and-water, and no hope was entertained of her recovery. Without any evident cause, the symptoms, however, gradually subsided, and she was safely delivered, at the end of the seventh month, of a dead child, with a diseased placenta. In this case the membranes, I think, should have been perforated long before the proposal to do so was made.

(CASE 72.) A lady, æt. twenty-nine, being six weeks pregnant, suffered severely from sea-sickness on the passage from Dublin to Liverpool, at the end of June, 1839. The irritability of the stomach gradually became more distressing after her arrival in London at the beginning of July, and nothing was retained, except a little brandy-and-water, for twenty days. Prussic acid, effervescing draughts, calomel and opium, leeches, laudanum, and blisters to the pit of the stomach and region of the uterus, and all the other ordinary remedies, were totally useless. The emaciation and fever had become so great on the 23d July, that it was evident she would soon die if not relieved. Dr. Merriman then saw her along with Mr. Jorden and myself, and advised the *mistura creta* to be given, and creosote, and abortion to be induced if the symptoms were not relieved. To prove the necessity of great caution in this proceeding, Dr. Merriman related to us a case of vomiting during pregnancy, which had occurred some years before to a celebrated accoucheur, which had ended fatally after the performance of this operation, and for which he had unjustly incurred much odium. On the 24th, the symptoms being still more alarming, I evacuated the liquor amnii. Calomel, opium, prussic acid, with bicarbonate of soda, and a blister to the epigastrium, were ordered, but they did no good. On the 27th July, the ovum was expelled, and a considerable quantity of coagulated blood, and she soon after began to sink, and died in a few hours. Dr. Chambers and Dr. Bright were also consulted in this distressing case. The coats of the stomach and bowels and all the other viscera were in a healthy state, and no morbid appearances could be detected in the membranes of the ovum. No nerves in the uterus!

(CASE 73.) A lady in the sixth month of pregnancy, was seized with violent sickness and vomiting, on the 26th May, 1846. At first the ordinary contents of the stomach, with bile and viscid mucus, were rejected. Dark bilious evacuations took place. The tongue furred; papillæ red. Urgent thirst. No tension of hypogastrium, or pain on pressure. No tenderness about the region of the uterus. Very rapid pulse. Calomel and small doses of sulphate of magnesia in infusion of roses, with tincture of opium, were given without the slightest benefit. Along with the sickness and vomiting, severe pains had been experienced in the left ear and side of the face. On the 4th June, there was no abatement

of the urgent symptoms. There was great exhaustion, and striking alteration of the countenance, which made us fear that she would speedily sink if not relieved. Every thing was rejected the instant it passed into the stomach. This lady was under the care of Mr. Barnes and Mr. Edwards, and she was seen by Mr. Blagden. I perforated the membranes readily with the stiletted catheter, and drew off a large quantity of liquor amnii. On the 6th June, the fœtus and placenta were expelled, with large masses of hard coagula of blood. The vomiting immediately ceased, and soon after, a little food was retained, and recovery took place rather rapidly. I had no doubt from the first, that in this case the cause of the vomiting existed in the uterus, though there was no symptom of irritation at the time present in the uterine region. The operation of inducing premature labour was not performed in this case until every remedy had failed to give relief.

(CASE 74.) Since the occurrence of the preceding case, I have seen, in consultation with Mr. Jonson, of Grosvenor-place West, another, still more severe. The strength was so much reduced in this case, by six weeks of incessant vomiting, and the emaciation was so extreme, that I thought the patient would certainly die after delivery. She, however, ultimately recovered completely, and owed her life to the operation.

(CASE 75.) On the 21st October, 1847, I saw a lady, in the eighth month of her fifth pregnancy, who had a severe attack of crural phlebitis after her last confinement, which had greatly impaired her general health. Six weeks before I was called to see her, she had been attacked with severe bronchitis and fever, and a fortnight after, when these had subsided, with frequent vomiting, which continued. There was great emaciation, sunk countenance, parched lips; tongue coated with aphthæ, and the whole inner surface of the mouth. Pulse 120. In spite of the best treatment, directed by two very eminent practitioners, the patient continued to lose ground, and it had become obvious that she would soon sink, if the symptoms were not speedily relieved. There could be no doubt that the state of the gravid uterus was the cause of the illness, and that there was no hope of her recovery, unless the uterus was relieved. We proposed to induce premature labour, if there was not a speedy improvement of the symptoms. Eleven A.M., 23d, the previous night had been passed with constant vomiting. The pulse still more frequent and

feeble. Mr. H—— punctured the membranes. From the instant that this was done, the vomiting ceased, and she appeared much better. Labour-pains came on, and the child was born at six P.M. The placenta was soon expelled, and the uterus, half an hour after, was felt firmly contracted. It soon after, however, became relaxed, and a considerable discharge of thin bloody serum took place. In spite of all our efforts, the hemorrhage continued, and death took place at four A.M. The impression made upon my mind by this case was, that the result might possibly have been more favourable had the uterus been emptied of its contents at an earlier period, and that where remedies fail in such cases to arrest the symptoms, the induction of premature labour should not be postponed. No nerves in the uterus!!

(CASE 76.) On the 14th November, 1841, Mr. Russell, of Broad-street, called me to see a patient near the full period of pregnancy, who had suffered for ten days from profuse discharge of blood from the intestines. At first it was supposed to proceed from piles. Great sickness and vomiting, rapid feeble pulse, sallow complexion, were the general symptoms. Some cathartic medicine was at first given to evacuate the bowels, but little feculent matter was discharged, and with it a pint of pure fluid blood. The pulse becoming still more feeble, and the patient more exhausted, and unable from the sickness to retain the lightest food, and there being no sign of labour appearing, the membranes were opened on the 16th, but the liquor amnii was not discharged. On the 22d, labour however, came on, and an arm presenting, Mr. Russell passed the hand into the uterus, and delivered by turning. The child had been dead some time, as we had previously suspected from the pulsations of the fetal heart not being heard. On the 23d the patient was much better, and recovered completely.

(CASE 77.) On the 1st of October, 1843, Mr. Webster, of Connaught-terrace, called me to see a lady in the fifth month of her second pregnancy, who had a short time before been attacked with severe pain in the region of the bladder, frequent calls to void the urine, and paroxysms of fever like hectic. Leeches had been applied to the hypogastrium, and all other appropriate treatment adopted to alleviate the irritation and inflammation of the bladder and fever, but without effect. Pus in large quantity was voided with the urine, and the symptom having assumed an alarming character, we re-

solved to empty the uterus. On the 3d the labour was completed, the symptoms were soon greatly relieved, and pus with the urine gradually ceased to be voided. On the 6th of October, 1843, Mr. Tegart presented to me the corpus luteum of a woman who came into St. George's Hospital, in the third month of pregnancy, with disease of the kidneys. There was blood passing with the urine. The ovum was expelled spontaneously, and she died twenty-four hours after.

(CASE 78.) In the month of January, 1845, Mr. Clarke, of Gerrard-street Soho, requested me to see a patient far advanced in pregnancy, who was in a condition bordering upon mania, or rather, was actually maniacal. For some time she had passed sleepless nights—had often a wild look, and was wholly incoherent, with dilated pupils. Pulse 80, moderate strength; tongue clean; bowels open. There was no headache, nor flushing of the countenance. Leeches to the temples, purgatives, and other means were employed, but the symptoms not being relieved, and fearing that convulsions would occur before or after labour, we resolved to puncture the membranes, and relieve the brain by emptying the uterus. A gentleman who was present at the consultation proposed delivery forthwith, by dilating the uterus and turning the child. Soon after the escape of the liquor amnii, labour-pains came on, and in due time a living child was born, and the mental disorder disappeared, though slowly.

(CASE 79.) A young woman, in the sixth month of her second pregnancy, died of chorea on the 29th August, 1840, in St. George's Hospital. The symptoms were at first slight, and were apparently produced by a fright. The convulsive movements became so violent, that it was found necessary to put on a strait waistcoat, and fix her down to the bed. Forty-seven hours before death the contents of the uterus were expelled. The brain and spinal cord were perfectly healthy. There were some small vegetations on the mitral valve. The right kidney and ureter were wanting. The supra-renal capsule was present. The uterus was in a natural state. The corpus luteum was unusually small, and the coats of the Graafian vesicle could scarcely be seen within the yellow matter. When the treatment failed to relieve the symptoms, and they became violent and dangerous, would it have been advisable to induce premature labour?

FOURTH REPORT.

THE HISTORIES OF ONE HUNDRED AND ONE CASES OF PRETERNATURAL LABOURS.

(CASE 1.) On the 10th October, 1823, in a public institution, a case of preternatural labour occurred, and the uterus was ruptured before or during the operation of turning. The arm of the child was in the vagina, and the uterus contracted strongly during the time an unsuccessful attempt was being made to turn the child with the right hand. Being fatigued from the pressure, the right hand was withdrawn, and on the left hand being introduced into the uterus, a rent was discovered to have taken place on the left side, through which the fœtus had wholly escaped into the peritoneal sac. The hand was passed through this opening, the feet grasped and without much force being employed, the fœtus was drawn back into the cavity of the uterus, and extracted. I did not see the patient till ten hours after she had been delivered, and was then almost disposed to doubt the accuracy of this statement, from the absence of every symptom of rupture of the uterus. The pulse was seventy; there was no vomiting, and no tenderness of the abdomen. On the 12th there were no quickness of pulse, vomiting, or pain in the region of the uterus; but these symptoms occurred on the 13th, and she died on the 17th, apparently from peritonitis. I examined the body on the 18th, and found the omentum, intestines, and liver covered with lymph, and adhering together. The uterus was as much reduced in size as usual six days after delivery. On the left side its lower part adhered firmly to the bladder and surrounding peritoneum, so that no appearance of laceration could at first be detected in the uterus. When removed from the pelvis, and the lymph peeled off, a rent two inches long was seen in the peritoneal

coat of the uterus, but the edges were in close contact, and had been kept together by a layer of lymph. On cutting into the cavity of the uterus, a great ragged opening was seen in the lining membrane and muscular coat on the left side. But for the attack of peritoneal inflammation, this woman would in all probability have recovered, and nature repaired the injury inflicted upon the uterus.

(CASE 2.) On the 1st August, 1824, at eight P.M., I was called by a midwife to Mrs. Sims, æt. twenty-four, residing at No. 3, Little White Lion-street. The right arm of the fœtus presented, and was low in the vagina, with a large portion of the umbilical cord, without pulsation. The shoulder and thorax were squeezed into the brim of the pelvis, with the os uteri widely dilated. The liquor amnii had all escaped several hours. I passed the right hand into the uterus, so as to touch one of the feet with my fingers, but it was contracting so strongly that it was impossible to grasp the foot, and turn. Being exhausted by the efforts made to complete the delivery, and afraid of rupturing the uterus, I abandoned the case to a more experienced practitioner, who succeeded, after long and violent efforts, in bringing down the feet and delivering. Great tenderness of the uterus, with fever, took place on the evening of the second day, and she died in forty-eight hours, of uterine inflammation. Had twenty ounces of blood been drawn from the arm, a large dose of laudanum been administered, and the operation of turning delayed for some hours, it is probable this case would have ended more favourably.

CASE 3.) October 15, 1824, Great St. Andrew's-street. Membranes ruptured four hours, and liquor amnii entirely discharged. The pelvis was distorted, but not very much. The right arm swollen and livid, protruding out of the os externum, and the shoulder and a part of the thorax wedged in the pelvis, the uterus contracting forcibly upon the body of the child. Pulse quick, face flushed, vagina hot, dry, and tender. Fifty ounces of blood were drawn from the arm at two bleedings, and one hundred drops of laudanum, in two equal doses, at short intervals, were administered, before any very strong efforts were made to turn, but no remission of the pains followed. Two hours after, the pains still continuing, I attempted to turn, but could not succeed, as the hand was soon rendered useless by the pressure. This effort to turn was continued for an hour and upwards, and it seemed pro-

bable the uterus would be ruptured if I persisted. Another practitioner, of much greater experience, then tried to turn, and used far greater force than I had done, and continued the effort for a much longer period, but he also was compelled to desist. I then separated the arm at the shoulder-joint, perforated the thorax, and fixing the crotchet on the spine, drew the child through the pelvis, doubled up. This patient recovered favourably, and has since been delivered of a child, the nates of which presented, and the life of which was destroyed by the difficulty of drawing the head through the distorted brim.

(CASE 4.) On the 1st May, 1827, Mrs. Richards, Charles-street, Drury-lane, had been two days and two nights in labour, and was quite exhausted. The left arm, much swollen, was presenting, and around it a loop of the umbilical cord, which did not pulsate. There was great thirst and restlessness. Pulse quick, and the abdomen was tense, and painful on pressure. The uterus was contracting around the body of the child with great force, and I found it impossible to pass up the hand, or to push back the presenting part, so closely was it impacted in the pelvis. Sixteen ounces of blood were drawn from the arm, and an opiate given at four A.M. At seven the pains had nearly ceased, but were renewed with great violence on attempting to pass up the hand. The child being dead, I proceeded without delay to deliver, as in the last case, and though greater difficulty was experienced in extracting the child, the patient sustained no injury. Here also there was contraction of the pelvis, and a fistulous opening between the bladder and vagina of several years' duration, from sloughing of the parts after a protracted labour, and the employment of the forceps.

(CASE 5.) On the 14th May, 1827, I saw a patient, in King-street, Drury-lane, in whom the left arm of the fœtus presented, and the shoulder and thorax were forced deeply into the pelvis. The umbilical cord was hanging out of the external parts, and did not pulsate. The uterine contractions were strong, and were much increased on attempting to turn. The delivery was easily effected, as in the two last cases.

(CASE 6.) Mrs. Manning, æt. twenty-two, 131, Drury-lane, 3d December, 1827, had been several days in labour under the care of a midwife, before it was ascertained that an arm was in the brim of the pelvis along with the head.

When Mr. ——— was called, he found this to be the case, and passed up his hand into the uterus to turn the child. He brought down only one foot, and left this in the vagina, after being exhausted with the efforts he had made to turn. After several unsuccessful efforts, repeated at intervals during a day and a night, I was called to see the patient. I found the left leg in the vagina, and the head and thigh in the brim of the pelvis. Uterus still contracting strongly. After taking away twenty-four ounces of blood, I endeavoured to push the head aside, and bring down the breech, but to no purpose. As the child was dead, I perforated the head, evacuated the brain, and endeavoured to extract it with the crotchet, but did not succeed till the thigh and leg had been pushed above the brim. The shoulders were dragged through the brim of the pelvis with difficulty, and I afterwards ascertained that there was considerable distortion of the pelvis. Severe inflammation of the uterus followed, which yielded to bloodletting.

(CASE 7.) Sarah Oulton, 9th April, 1827. The arm presented, the liquor amnii discharged, uterus contracting, and the delivery was effected with great difficulty. She died of inflammation of the uterus a few days after. Child still-born.

(CASE 8.) Mrs. Bain, 18th December, 1827, Wellington-square, Gray's-inn-lane. Labour had continued twenty-four hours. Membranes ruptured, three. The arm and funis presenting. Os uteri partially dilated, high up. An arm and long loop of the cord, which pulsated, were in the upper part of the vagina. Passed the right hand with some difficulty into the uterus, and got a finger into a ham, and soon turned the child. In doing this, the cord was compressed so much, in spite of all that I could do, that its pulsations gradually became more and more feeble, and they had ceased long before the child was born. Recovered.

(CASE 9.) On the 12th February, 1827, called by a midwife to a labour at No. 1, Porter-street, Newport-market. An arm presented. I turned, and delivered without much difficulty. The child had been dead for some time, the cuticle was peeling off, and it had not reached the full period. Another bag of membranes was felt. The arm of the second fœtus likewise presented, and it also was turned and delivered. A third was delivered naturally about an hour after. They were all dead, two boys and a girl. Recovered.

(CASE 10.) March 25, 1828. At ten P.M., saw a case in Wild's-court, where the right arm and umbilical cord presented. The membranes had been ruptured nine hours, and the liquor amnii had entirely escaped. There was little uterine contraction. I passed the right hand easily into the uterus, and brought down a foot, and turned. The head was extracted with difficulty, from the chin getting over the front of the pelvis. Child still-born. This was her second child. The nates of the first presented, and was also still-born. Recovered.

(CASE 11.) 20th April, 1828, at three A.M., saw an out-patient of the Brownlow-street Hospital, in Stewart's-rents, Drury-Lane. One child had been expelled in the natural manner, but I found the right arm of the second in the vagina. The pains were not strong, and the hand was easily passed into the uterus, the feet seized and brought down. Child alive. An hour had elapsed from the expulsion of the first before the second was delivered. Recovered.

(CASE 12.) April 26, 1828. At eight A.M. saw a patient in Vine-street, Chandos-street, who had been in labour five hours. The right arm and a long loop of the umbilical cord were hanging out of the external parts. It did not pulsate. The uterus was not contracting strongly, and I never accomplished the operation of turning with greater ease. As the placenta did not come away in the usual time, I passed up the hand to remove it, and found it adhering partially to the uterus. There was no difficulty in detaching and withdrawing the placenta, but while doing this, I felt a rupture in the neck of the uterus and vagina. On introducing the hand, I discovered an immense laceration, through which a portion of intestine was protruding. There was no hemorrhage. On the 27th, there were no unfavourable symptoms, but she became delirious. The pulse rapid, the countenance collapsed, frequent vomiting, offensive discharge, and she died on the 30th April. There was a rent four inches long in the posterior part of the uterus. The vagina was sound.

(CASE 13.) August 19, 1828, Mrs. Hart, 43, Charles-street, Drury-lane, a patient of Middlesex Hospital. The right arm presented. The liquor amnii had entirely escaped, yet there was no contraction, and I had no difficulty in passing the hand up, seizing a knee, bringing it down, and turning. The child alive. I never turned with so much ease. The pelvis large, the parts dilatable, uterus quiet. Yet the delivery was followed by severe inflammation of the uterus, which yielded to bleeding.

(CASE 14.) At four A.M., Sunday, 15th June, 1828, saw a case at 43, Foley-street, the left arm and funis presenting, under the care of Mrs. Marsh. It was her second child. The labour commenced on Friday evening, and continued the whole of yesterday (Saturday), till seven P.M., when the membranes gave way. Although the presenting part could not be felt, the midwife continued to attend without much anxiety till three this morning, when she found the funis and arm presenting. I found about a foot of the cord protruding, and without pulsation. The pains were strong and frequent. I gave 120 drops of laudanum, and waited half an hour, when the pains diminished. I then passed up the right hand, and seized a knee, which I brought down easily. I could not reach the other, but pulling gently on the thigh, the breech descended, and was soon expelled. The remainder of the child was easily extracted. The placenta soon followed, and the laudanum did not prevent the uterus from contracting. No hemorrhage. Recovered.

(CASE 15.) September 18, 1828, a patient of the Westminster Dispensary, at 26, Little St. Andrew's-street. One child had been born alive, and not long before I found the arm and shoulder of a second protruding out of the os externum. Though there were labour-pains, I passed up the hand with great ease, and brought down the feet. The child was still-born.

(CASE 16.) December 15, 1828. At two o'clock this morning, called to the Brownlow-street Hospital, to deliver in a case where the arm presented. It was supposed the breech presented, and in consequence I did not see the case till the liquor amnii had nearly all escaped, and the left arm and thorax of the child had been pressed deeply into the pelvis. The membranes gave way at ten last night. The uterine contractions were so strong and frequent, that I could not pass the hand without using too much force. V.S. ad twenty ounces, laudanum ninety drops. In twenty minutes the strength of the pains had diminished, and without much difficulty I introduced my left hand, and got hold of a foot, and accomplished the operation with great ease. The placenta soon followed. Child was not alive. Recovered.

(CASE 17.) January 3d, 1829. Dr. Jewel requested me to see a case in which the arm presented, and where he could not accomplish delivery by turning. He had first given sixty, and then forty drops of laudanum, yet the os

uteri continued so contracted, and the pains so strong, that the hand could not be introduced to turn. The os uteri not being fully dilated, and very high up, great difficulty was experienced, after the removal of the arm and perforation of the thorax, in getting the crotchet over the spine. At last, however, it was effected, and the delivery was accomplished without any injury to the mother.—V.S. Opiates and rest for many hours would in all probability have rendered the operation both safe and easy.

(CASE 18.) January 9th, 1829, at three A.M., requested by Dr. H. Ley to visit a patient for him in White-horse yard, Drury-lane. She had been in labour all the day. I found the right arm without the external parts. The pains were slight. I introduced my right hand, and soon got hold of a foot, but had some difficulty after in turning. I succeeded, however, in about twenty-five minutes. Child still-born. Recovered.

(CASE 19.) Friday, 29th May, 1829, 14, Prince's-row, Newport-market. Mrs. Buck. In labour for four days, but pains feeble. The liquor amnii escaped on Monday; the left arm much swollen in the vagina; the os uteri contracted and rigid around the shoulder. At nine A.M., ordered V.S. ad sixteen ounces. At one P.M., os uteri less rigid and more dilated, and I proceeded to pass up my left hand, and had no great difficulty in seizing a foot, which was soon brought into the vagina, and the turning was easily accomplished. In about ten minutes she had a most violent rigor. The placenta being detached, was soon removed, the uterus having previously contracted firmly. The rigor became more and more violent, and the pulse extremely feeble. She recovered a little, but died in eight hours. The body was not allowed to be examined, but it was my conviction that the uterus had been lacerated. Child still-born. I regretted not bleeding this patient to a far greater extent before turning.

(CASE 20.) 2d June, 1829. A woman in Great Earl-street was delivered of a child alive this morning at one o'clock; the breech presented. The midwife discovered that there was a second, but waited four hours for its expulsion, supposing the nates also to present. The pains were strong all this time. I found the left arm swollen in the vagina. I used great force to introduce my hand to turn, but could not succeed without certain risk of injury to the

uterus. I therefore drew down the presenting arm and the shoulder to the outlet of the pelvis, then passed my hand into the vagina, and grasping the chest and abdomen of the child, brought them through the pelvis without difficulty. The child passed out completely doubled up. Recovered. The arm was not removed, nor the thorax perforated in this case. Tenderness of uterus followed the operation.

(CASE 21.) On the 8th of November, 1829, a case occurred in Vere-street, of distortion of the pelvis, with presentation of the arm. The labour had commenced the preceding night, but the presentation had not been ascertained till the following morning, at eight o'clock, when a practitioner was called by the midwife to perform the operation of turning. Long and violent, but unsuccessful efforts, were made to bring down the feet. Another accoucheur was then called, but his attempts to turn being equally fruitless, he detached the arm from the shoulder, and renewed the attempt to turn the child. At one o'clock, both gentlemen being completely exhausted, I was requested to see the patient, and endeavoured to deliver her. The vagina was enormously swollen, the thorax of the child occupied the brim of the pelvis, and on passing up the right hand, between this part of the child and the anterior part of the pelvis, the points of the fingers touched one of the feet; but I could not succeed in passing the hand sufficiently high up to grasp the foot. I succeeded, however, in passing a pair of small craniotomy forceps along the palm of my hand to the foot, and drawing it down into the vagina. The nates and trunk of the child were soon extracted, but the head would not pass through the brim of the pelvis till it had been perforated behind the ear, and drawn down with the crotchet. The patient died on the second day after delivery from laceration of the orifice and neck of the uterus. There was an unusual projection of the base of the sacrum.

(CASE 22.) At one A.M. 28th July, 1829, a case of presentation of the right arm occurred in Museum-street. The os uteri was fully dilated, the membranes ruptured, the pains few and feeble. I passed up the hand between the front of the pelvis and child, and had no difficulty in bringing down the feet. Recovered.

(CASE 23.) In the autumn of 1829, a case of arm-presentation occurred in Adam-and-Eve-court, Oxford-street. The patient remained three days with the arm, immensely swollen,

and cord, hanging out of the external parts. She would not allow the operation of turning to be performed by any medical practitioner, and expressed her determination to die undelivered. I was informed that she afterwards, when completely exhausted, consented to have the child delivered by a midwife, and that the operation of turning was performed. Recovered.

(CASE 24.) She was in labour again on the 14th of August, 1831, and the right arm presented. She was under the care of Mr. Prout, but would not allow him to interfere, having resolved to sacrifice her life on this occasion; and she was again three days and nights in strong labour, and ultimately the child, though at the full time, was forced through the pelvis, doubled up, in a putrid state: the head was flattened, and the contents of the abdomen pressed through the parietes. She recovered without a bad symptom.

(CASE 25.) On the 22d of May, 1830, I was called by a midwife to Mrs. Haddon, æt. thirty, residing at No. 3, Castle-street, Bloomsbury. The membranes had been ruptured, and the liquor amnii discharged a week before. Slight irregular pains had been felt during the whole of this time, but the os uteri was high up, and the presentation was not ascertained till the morning of this day. The left arm, with the cuticle peeling off, was then found, to the surprise of the midwife, hanging out of the vagina, and the shoulder and a great part of the thorax squeezed into the brim. The uterine action was not very strong, yet the uterus grasped the body of the child so firmly, that I could not introduce the hand without using a degree of force which did not appear justifiable, as the child was dead. Every attempt to pass the fingers through the os uteri roused it to violent expulsive efforts. I removed the arm at the shoulder, perforated the thorax, and drew it out with the crotchet, doubled up. Tenderness of the uterus followed, which was relieved by bleeding. Recovered.

(CASE 26.) On the 29th of August, 1830, No. 1, Brown-court, Edgeware-road, a case of twins occurred. The first child had been born four hours before; the arm of the second presented. As the membranes were unruptured, and the uterus in a state of perfect rest, no difficulty was experienced in bringing down the feet of the second child, and delivering it alive. Recovered.

(CASE 27.) On Wednesday evening, the 22d of Septem-

ber, 1839, I was requested to visit a patient in whom the right arm presented. Labour commenced the preceding evening with rupture of the membranes and escape of the liquor amnii. Pains followed in the course of the night, but the presentation could not be ascertained till the following morning, when an arm was felt at the os uteri. The midwife attempted to turn the child, but could not succeed. In the course of the day the medical attendant likewise attempted to bring down the lower extremities, but the rigidity of the os uteri prevented the introduction of the hand into the cavity. In the evening I endeavoured to pass my hand, but could not overcome the contraction of the orifice; the right arm, and a large loop of the funis, were hanging out of the external parts. Fifteen ounces of blood were drawn from the arm, and fifty drops of laudanum administered. Three hours after, another attempt was made to deliver by turning, but it was likewise unsuccessful from the same cause. Again, in the morning, the bleeding having been repeated to a far greater extent, another effort was made to pass the hand; but this also failing of success, the medical attendant then proceeded to deliver, by removing the arm at the shoulder-joint, and eviscerating the child. Nearly three hours were spent in tearing down the thorax, and drawing the trunk and extremities through the pelvis. In effecting this, the cervical vertebræ were unfortunately torn, and the head left within the cavity of the uterus. A broad roller was passed firmly around the abdomen, and the left hand immediately introduced into the cavity of the uterus, and the finger placed in contact with the head. The point of the perforator was carefully conducted along the palm of the hand, and between the fore and middle fingers, to the most dependent part of the head, and a free opening made. The crotchet was then passed up, and introduced through this opening within the skull, and the head extracted with the hand and crotchet. The head was drawn out with difficulty, from the rigid state of the cervix uteri. She died soon after. More copious bloodletting and larger doses of laudanum should, I think, have been employed in this case, and still more time given for relaxation of the os uteri to take place.

(CASE 28.) On the 24th October, 1830, in a patient of the British Lying-in Hospital, labour commenced at two A.M., and at seven the membranes were ruptured, and the left arm descended low in o the vagina. The pains were strong, but

the intervals between them were long. The whole liquor amnii had escaped. I passed the right hand into the uterus, and directed it to the left side, where it came in contact with a knee, which I seized, brought down, and without difficulty turned, and delivered the child alive. Recovered.

(CASE 29.) On the 4th December, 1830, I examined the body of a woman who had died four hours after being delivered by the operation of turning. The mucous and muscular coats of the uterus were deeply lacerated at the back part of the cervix. This patient had been two days in labour under the care of a midwife before the presenting part was felt, and then an arm was found low down in the vagina. The practitioner, who had been called to deliver, had experienced great difficulty in turning.

(CASE 30.) In June, 1831, I met with a case of twins in private practice. The head of the first presented, and was expelled without assistance. On putting the hand over the abdomen, I felt a second, and soon ascertained that the arm presented. Before the uterus had time to contract upon this child, and the membranes to be ruptured, the coat was off, the arm bare, covered with lard, introduced, and the feet brought down into the vagina. The binder was then firmly applied, and when the uterus began to act, the child was extracted alive. The placenta came away in due time, and no hemorrhage took place. Had this case been left for a short time, it is probable great difficulty would have been experienced in turning; the child would have been dead, and the mother might have been destroyed.

(CASE 31.) December 1831. Another case of twins occurred to me in private practice, at No. 20, Wells-street. The nates of the first and the arm of the second presented. By losing no time in bringing down the feet of the second, it was also born alive, and the mother recovered.

(CASE 32.) On the 3d Nov., 1831, I was called to a patient of the Southwark Lying-in Institution, in whom the arm presented. The membranes had long been ruptured, and the liquor amnii discharged, and the uterus was firmly contracted around the body of the child. Great difficulty was experienced in passing the hand into the uterus, and turning. The child was dead; the mother recovered.

(CASE 33.) On the 18th August, 1833, at No. 27, King-street, Golden-square, I saw a case in which an arm presented, and the medical attendant had made long and zealous,

but useless, efforts to accomplish delivery by the Hippocratic method — viz., pushing back the arm that the head might come down. I passed the hand into the uterus, and brought down both feet at once, and easily delivered, but the child was dead.

(CASE 34.) 13th February, 1833, at No. 5, Short's Gardens, I saw a case of labour, in which the right arm presented; the membranes had been ruptured some hours, but the uterus was not contracting, and no difficulty experienced in bringing down the feet and extracting the trunk and extremities; but when this was done, I found it impossible to draw the head through the brim of the pelvis. The child being dead, the crotchet was passed, and the point forced into one of the orbits. Recovered.

(CASE 35.) Fourteen days before this, a case of twins occurred in the lying-in ward of the S. M. I. The arm of the second child presented, and the pains were so violent, that it was driven through the pelvis, doubled up. The hand could not be introduced to turn, so vehement was the uterine action, and so low had the shoulder and thorax descended into the pelvis. The child was small and still-born.

(CASE 36.) On the 23d of October, 1833, in Plumtree-street, Mrs. Farrel called me to a case of twins. The arm of the second presented, but it was dead. Dangerous hemorrhage followed the expulsion of the placenta. Pressure, the application of cold water to the external parts, and stimulants, were the means successfully employed.

(CASE 37.) 2d January, 1834. Mr. Garden called me to a case of labour, in Charlotte-street, in which the right arm presented. The membranes had not long been ruptured. The shoulder and arm low down. The uterus acting, but not forcibly. I passed the right hand and brought down a foot; and from the difficulty experienced in turning the child round, regretted that both had not been brought down at once. Child dead. Mother recovered.

(CASE 38.) On the 14th July, 1834, Dr. H. Davis induced premature labour in a patient with distorted pelvis, in the British Lying-in Hospital. The left arm presented, and he turned, but the child was dead. Mother recovered.

(CASE 39.) 2d March, 1836, a case in which the left arm and umbilical cord, without pulsation, presented, occurred in James-street, Oxford-street. The pains were feeble. Os uteri half dilated, but not rigid. Pelvis large. Second child.

Passed the right hand up between the front of the pelvis and shoulder, along the presenting arm, and soon got hold of a knee and turned.

(CASE 40.) On the 31st July, 1836, I attended a lady in labour, who had been delivered twice before, and both her children had been still-born, in consequence of an arm presenting, and the operation of turning being required. On this occasion, several weeks before the labour commenced, she expressed her conviction to me that the child was in the same position as in her former labours. Labour-pains began on Sunday morning, the 31st July, and continued feeble and irregular till three P.M. On examining, the os uteri was then found dilated to the extent of half-a-crown, and the membranes protruding in an unusually elongated form. The presenting part could not be felt. I examined again in three hours, and found the dilatation considerably advanced, and the membranes protruding still more into the upper part of the vagina; and high up, the finger touched some part of the child which was more pointed and moveable than the head. She remained in the horizontal position, that the membranes might be preserved entire as long as possible, till turning could be most advantageously performed. At midnight, the dilatation of the os uteri being nearly completed, I passed up the hand into the uterus, and finding a shoulder presenting, brought down both feet, turned, and extracted the child in a very short space of time, and without any force being used, the external parts offering no resistance. But the cord was without pulsation, and all our efforts to excite respiration were fruitless. The death of the fœtus, as Mauriceau states, is probably the cause of many cases of arm-presentation, but in this and others here related, the child was alive when the hand was introduced into the uterus. I feel wholly unable to explain the cause of preternatural presentation occurring repeatedly in the same individuals, as described by Dr. Denman and other systematic authors.

(CASE 41.) 2d August, 1836. James-street, Oxford-street. The left arm, and a large portion of the funis, which did not pulsate, in the vagina. Liquor amnii gone. Os uteri dilatable. Pains feeble. Labour had continued twelve hours. The right hand was passed up without difficulty between the front of the pelvis and fœtus, the feet grasped, and the turning safely effected.

(CASE 42.) On the 4th August, 1836, I was called several

miles from London, to a case of labour, in which the left arm presented. The membranes had been ruptured, and the liquor amnii discharged many hours, and the uterus was firmly contracted around the body of the child, which was premature and dead. Strong efforts had been made to turn, but the os uteri was rigid, and only partially dilated, and the shoulder and thorax squeezed so firmly into the brim, that it was found impossible to pass the hand into the uterus, without the greatest danger of laceration. Instead of forcing the hand into the uterus, I laid hold of the arm and pulled it down as low as possible, with the view of making the child pass, doubled up, through the pelvis; and to assist in this, the fingers of the left hand were carried as far as possible over the abdomen, towards the pelvis. With moderate traction upon the arm and trunk, the child came forth, precisely as in cases of spontaneous evolution. The child was in a very putrid state, and the patient died after from uterine peritonitis and phlebitis.

(CASE 43.) On the 3d November, 1836, Mr. Morley, of Cavendish-street, called me to assist him in delivering a lady under his care. The presenting part could not be ascertained for a long time after the labour began. When the membranes gave way, a large portion of the umbilical cord came through the os uteri into the vagina, and did not pulsate. The left arm was soon after felt at the os uteri, and repeated attempts made to pass the hand along it into the cavity of the uterus, to turn, but it was contracting so vigorously that the hand could not pass. Venesection was performed, and a starch-and-laudanum glyster administered; but the pains increased, and the shoulder and arm continued to descend lower and lower; and when I saw the patient, the left arm was hanging completely out of the external parts. The back of the fœtus was to the front of the pelvis, and the trunk pressed into the brim. I expected to find the nates of the child to the left side of the mother. I first tried to turn with the left hand passed up between the front of the pelvis and the presenting part; but the pressure of the uterus was so great that it was soon removed, being powerless, and the right introduced in its place, which was also in no long time obliged to be withdrawn. The left hand having recovered from the effects of the pressure, was again slid up between the front of the pelvis and fœtus, and without much difficulty passed high up into the uterus, and a foot seized and brought down, and the operation of

turning completed with safety. The cord was twice round the neck and once round the trunk. The cuticle was peeling off the child.

(CASE 44.) On the 14th November, 1836, I was requested by Dr. Jewel to assist him in delivering a woman residing in Princes-court, Whitcomb-street. Labour began at five in the afternoon, with sudden rupture of the membranes, and escape of the whole liquor amnii. Soon after, the left arm was found hanging out of the external parts, and the right in the upper part of the vagina. After the exhibition of a large dose of laudanum, several strong efforts were made to bring down the feet, but the uterus was so closely contracted around the child that the hand could not be introduced. At one in the morning, I found the left arm of the child, greatly swollen and cold, hanging out of the vagina, and the right in the upper part, not half the size of the other. At first I tried to deliver by passing up my left hand between the child and the sacrum, and back part of the uterus. I soon found that it would be impossible to reach the feet in this direction, and the left hand was withdrawn, and the right passed up between the front of the pelvis and the thorax of the child, and without much difficulty I succeeded in bringing down a foot. I fixed a tape around the ankle, and by pulling gently upon it, and at the same time pressing back the left shoulder, the child went round, and the nates and other parts were easily extracted. Since the occurrence of this case, and even before this, I have felt persuaded, whatever arm might present, and whatever the position of the fœtus in utero might be, with few exceptions, that the best plan is to employ the right hand in the operation of turning, and to pass it into the uterus between the front of the pelvis, where it is shallow, and the presenting part of the child. When the right hand is overcome, and rendered useless by the pressure of the uterus, it may be withdrawn, and the left introduced, and thus, by the alternate use of the hands, the delivery, in some difficult cases, may with safety be completed, which would otherwise effectually baffle any single individual, however dexterous and powerful.

(CASE 45.) On the 19th November, 1837, I was again called to deliver this patient. The labour began the morning before, with rupture of the membranes, and the gradual escape of a large quantity of liquor amnii. During the day the os uteri was not dilated, and there was no pain. A dose of castor-oil was given in the evening, but the labour-pains did

not commence till the following day, and I did not see her till five in the afternoon. There was then a loop of the umbilical cord pulsating within the orifice of the uterus, which was largely dilated. A foot also could be felt. There was no pain. Having waited a short time to see if the uterus would contract and expel the nates, and this not taking place, I took hold of the foot, drew it down, and very speedily, and with very little force, extracted the child, but it was dead, though the cord had been pulsating when I began to draw down the foot. If the pressure upon the cord was here sufficient to interrupt the circulation, how much greater must it be in every case where turning is performed for prolapsus of the funis—a practice which must generally be considered unjustifiable.

(CASE 46.) On the 8th November, 1839, I was called a third time to deliver this woman; the left arm presenting. The membranes had burst suddenly a short time before I saw her, and the arm had at once come down into the vagina. The os uteri was fully dilated, and the parts not rigid, so that the operation of turning was performed under very favourable circumstances, yet the child was dead. Mrs. Findley, the midwife, informed me that this woman had been delivered of eight children, and that only one of them was born alive. All the presentations had been preternatural.

(CASE 47.) On the 24th May, 1837, in Devonshire Mews, I saw a case of labour, in which the right arm was hanging out of the vagina, with a large portion of the umbilical cord, not pulsating. Several strong efforts had been made to turn, without success, in consequence of the violence of the uterine contractions. I passed up my right hand towards the left side of the fundus uteri, believing I should find the legs there, and soon brought one of them into the vagina, and put a tape round the ankle, and held it there while the other hand was passed up to the knee and thigh, and the proper traction made on them to bring down the nates. This was the fourth time the patient had been delivered, and every time the presentation was preternatural. On this occasion, the labour commenced on the 22d May, and lasted the whole of the 23d. The presenting part could not be felt till three A.M. of the 24th, when the membranes burst, and an arm and the funis came down.

On the 15th June, 1837, I was called to a young woman near the end of the ninth month of her first pregnancy, to

perform the operation of turning. Labour had not commenced, but the rectum was greatly distended with indurated feces, which were removed by enemata and castor-oil. The labour took place on the 17th, and the presentation was natural.

(CASE 48.) Saturday, 23d of December, 1837, I was requested by Dr. H. Davies to see a short, deformed woman, who had been in labour during the greater part of the preceding day. The left arm presented, and at midnight Dr. Davies had attempted, but unsuccessfully, to deliver by turning the child. At three in the morning I made several strong efforts to pass my hand into the uterus, and bring down the feet, but the uterus everywhere embraced the child so firmly, that I could not pass the hand either between the symphysis pubis and shoulder, or along the hollow of the sacrum. Dr. Davies made another attempt to deliver at four A.M., but it was also unsuccessful. A large opiate was administered, but venesection was not employed, on account of the feeble condition of the woman. At eleven A.M. another attempt was made to deliver, but the hand could not be introduced into the uterus, and we resolved to remove the arm at the shoulder-joint, perforate the thorax, and bring down the pelvis of the child with the crotchet, or bring the fœtus doubled up through the pelvis of the mother. The arm was then dragged down, and removed at the shoulder-joint, and immediately after, the thorax receded almost beyond the reach of the finger, and the orifice of the uterus contracted, so that it was difficult to fix the crotchet on any part of the child. Another effort was now made to turn, but it was found to be impossible to introduce the hand within the uterus. I then passed up the left hand into the pelvis, and insinuated two fingers within the uterus, and along these conducted the crotchet to the ribs of the child, and fixed its point, as I thought, near the lower part of the thorax, and pulled forcibly down. After much exertion, the thorax being greatly torn, and all the parts in a confused state, when I was engaged in making strong traction, the trunk separated from the head, and passed through the outlet of the pelvis. The left hand was immediately passed into the uterus, two fingers were introduced into the mouth, so as to keep the head steady, and the crotchet was introduced, and its point fixed on some part of the face. Without much difficulty the head was extracted. She died two days after, from lacera-

tion of the muscular and internal coats of the uterus on the anterior part. Moderate venesection, large opiates, and delaying to deliver till the uterus had ceased to resist the introduction of the hand; and had this delay extended to twenty-four hours, would have been better practice, I feel persuaded, than that which we pursued.

(CASE 49.) A case of twins occurred in Moor-street, on the 18th January, 1838. The first was delivered at seven P.M. The left arm of the second presented, but the proper time for turning was allowed to pass away, and the uterus again soon began to act with great energy, and the liquor amnii escaped, and the arm and shoulder were quickly thrust down to the outlet. In the efforts then made to turn, the right arm of the child also came into the vagina, and at nine P.M., when I first saw the case, both arms were protruding, and the uterus still acting powerfully. I experienced great difficulty in passing the hand into the uterus to grasp the feet, and after I had done this, as much difficulty in pushing the thorax out of the brim of the pelvis, to allow the nates to enter. But by persevering, it was at last accomplished without any injury being inflicted upon the mother.

(CASE 50.) 6th November, 1838, I was called to deliver a woman in the lying-in ward of the St. Marylebone Infirmary, in whom the left arm was hanging out of the vagina, and the shoulder strongly impacted in the brim. It was the first child. Long and vigorous efforts had been made by Mr. Clay to deliver by turning, but his hand never reached one of the lower extremities. I found the os uteri dilated, the whole liquor amnii discharged, and the uterus firmly contracting upon the child. I got my right hand between the shoulder and uterus on the anterior part, and touched a knee with the points of the fingers, but could not take hold of it. The hand soon lost all power to take hold of any thing, and was withdrawn. The left was slowly and very gently passed up, and almost as if by stealth, and the uterus allowed this to proceed much higher than the other, without being roused to contraction. The left foot of the child was brought down into the vagina, and a tape put around the ankle; by the help of this I was able to draw down the nates, while I pressed the shoulder out of the way. In an hour the delivery was safely accomplished, though not without some danger to the perineum. The child exceeded much the ordinary size. The great advantage of employing the left hand

when the right is rendered powerless by the pressure of the uterus, arises partly from the circumstance that the resistance can be much more slowly and safely overcome. The uterus seems to yield to the long-continued gentle force of the hands employed in succession, when it would not to one forced up more quickly.

(CASE 51.) Mrs. F——, first labour, 24th May, 1839, Oxford-street. Nine hours after the pains began, her medical attendant discovered that the presentation was preternatural. I found a foot and hand in the vagina. I drew down a foot, then the other foot, and extracted the nates, trunk, and superior extremities, but the head would not pass, from the rigid state of the perineum. If the head had been suddenly extracted, the perineum must have been torn, and the child's neck dislocated. For a very considerable time, probably half an hour or longer, the edge of the perineum was held back so as to allow the air to enter the mouth and lungs, and had this not been done, the child must have died before the head was born. The pulsation of the cord had entirely ceased, but the heart had never ceased to beat. By dashing cold water over the face, the child began to cry, and lived. The head of the second child presented, and having applied the binder, and ruptured the second set of membranes, its expulsion was left to nature. Pains soon came on, and it was expelled alive, and the placenta were detached and expelled in no long time, without any hemorrhage. Where the head of the second child presents in cases of prolapsus of the funis, this is the practice which ought to be adopted, at least in the first instance, and it generally succeeds. In Case 248, the second set of membranes had been allowed to remain long entire after the birth of the first child, and all this time the uterus was perfectly quiet, but in a few minutes after I had discharged the liquor amnii, strong pains began, and the child was soon born alive. If the uterus should not act within an hour or more after this has been done, turning would probably be upon the whole the best practice; but my experience does not enable me to speak confidently on this point, as I have seen so few cases in which it has been necessary.

(CASE 52.) Mr. Stodart, of Golden-square, requested me to assist him with a labour on the 5th March, 1839, in which the right arm of the fœtus presented, and a large portion of the funis, without pulsation, was in the vagina. The os

uteri was widely dilated, and the pains were not very strong or frequent. I passed up the right hand between the symphysis pubis and body of the child, and reached a foot, but the uterus then began to contract with such vehemence that it was impossible to bear the pressure, and the pain endured could not have been greater had it been squeezed in a vice. I withdrew it, and when it had recovered, again passed it forward, and laid hold of the foot and brought it down, and gradually effected the turning. No bad symptom followed.

(CASE 53.) At two P.M., on the 18th December, 1839, in a case of labour at the British Lying-in Hospital, the left arm presented, and was hanging out of the vagina. The uterus was not acting very strongly, yet it was firmly contracted upon the child. The labour had been going on all the preceding night, and the presenting part was not ascertained. I passed up my right hand, and soon reached a knee, but the uterus squeezed my hand so firmly that I was forced to withdraw it, and tried to use the left, but it was impossible to reach the knee with this. The right was again passed in, and the knee brought down, but with difficulty. After the leg was in the vagina, considerable time and force were necessary to bring the nates into the pelvis, though the presenting part was pushed aside as much as possible. Great assistance was obtained in doing this from a strong tape put around the ankle, which enabled me to hold the leg firmly in the vagina, while the right was passed up to seize and pull down the thigh.

(CASE 54.) Mr. Jonson, of Grosvenor-street West, requested me, in April, 1841, to see a case of labour in which the arm presented. The first stage was tedious, and for a time the presentation could not be determined. When the os uteri was dilated to the size of a crown, and thin, the membranes being unruptured, a hand was distinctly felt presenting. There could be no doubt about the propriety of turning the child before the membranes gave way, which they would in all probability soon have done. The operation was performed with the greatest care, and without the employment of much force, by Mr. Jonson, and the child was born alive, and has lived. Inflammation of the uterus, however, supervened, and at different times discharges of pus have taken place from the cavity, and it is now extremely doubtful if the patient will ever regain her health. A more

favourable case for the operation of turning never occurred, nor could it have been more skilfully performed, and yet the consequences were most injurious to the mother. I consider it impossible in any case to perform the operation of turning without more or less danger to the mother, and that it ought not to be had recourse to without necessity.

(CASE 55.) 16th August, 1841, at four A.M., —, æt. twenty-two, first child, twenty hours in labour, under the care of Mr. Harper. Membranes ruptured and liquor amnii gone. Right arm in the vagina, os uteri dilated, uterus not contracting very strongly. Many strong efforts had been made to turn. I passed my right hand up slowly along the arm and shoulder in the front of the pelvis, and turned without much difficulty, but the child was dead.

(CASE 56.) On the 24th November, 1841, Mr. Owen, Holborn, met with a case in which the right arm presented, and the liquor amnii had escaped at the very commencement of labour. I found the right arm in the vagina, the os uteri dilated, the uterus firmly contracted around the child, but not acting strongly. I passed the right hand very cautiously between the front of the pelvis and shoulder, and soon seized the feet, and turned. Both these patients recovered favourably.

(CASE 57.) 14th October, 1840, with Dr. Boyd and Mr. Graves, I saw a case, S. M. I., in which the head and hand presented, and it seemed probable the head would never enter the brim. I introduced my whole hand into the vagina, and, in the absence of pain, pushed the hand into the uterus with my fingers, and held it there till another pain came on, and the head occupied the brim. The child was soon born alive.

(CASE 58.) 19th January, 1842, Lisson-street, Paddington; second child. The left arm and shoulder forced into the brim, os uteri not fully dilated, but thin and yielding. No labour-pains, yet the uterus firmly contracted around the child; the liquor amnii gone four days. Child dead. Mr. Fitzherbert and Mr. Stodart had endeavoured to turn. I passed my right hand into the uterus on the fore-part, but was soon compelled to withdraw it, without reaching a foot, so violent was the pressure. The left was then passed, and with little force a foot was taken hold of and brought down, and the turning safely completed. But the placenta adhered with unusual firmness, and at the end of an hour we were obliged to remove it. During the labour the breathing was

observed to be unusually laborious, and in two days after delivery, she was seized with hemorrhage from the nose and mouth, which returned at intervals for some days, till she sank. Not allowed to be examined after death.

(CASE 59.) Mr. L——— was called to a case of labour in Sherrard-place, at four A.M., 2d August, 1842. The pains were not strong till the middle of the day. At five they were strong and regular, and it was ascertained that the presentation was preternatural. A hand was passed up into the uterus, and a foot brought down into the vagina; and from six till eleven at night, an arm and foot, and a portion of the funis, were in the vagina together. During this time there had been little pain, and no effort made to complete the turning, an expectation having been entertained that when the pains returned, nature would change the position of the child. I found the right arm at the orifice of the vagina, and the shoulder in the brim, and the foot hanging out of the os uteri into the upper part of the vagina. It was impossible to draw down this foot so low as to pass a tape around the ankle. I brought down the other foot with a good deal of difficulty, and having possession of both legs, the turning was soon completed. Wherever it is possible to bring down both feet in turning, it should always be done, as it renders the operation much easier. Sometimes one hip only descends at first through the superior aperture of the pelvis, and this renders it difficult, before the membranes are ruptured, to distinguish this part from the head, and very often it is not accurately ascertained before the membranes are ruptured. Then the meconium usually escapes, and the genital organs and anus, and the fissure between the nates, are felt. In most cases the nates pass through the pelvis, and nothing is required but to support the perineum; where the pelvis is small, and the child large and unfavourably situated, the natural efforts may be insufficient to expel the child either alive or dead. A finger should be passed up over one of the groins, and extracting force employed, or a silk handkerchief may be passed between the thigh and abdomen, and the nates drawn down. Where these means fail, and there is no hope of preserving the child, the blunt hook may be used. The superior extremities and head require to be extracted carefully and without much loss of time, when the cord pulsates, and this cannot well be done unless the face is made to correspond with the hollow of the sacrum. The

difficulty of delivering in the following case chiefly arose from rigidity of the perineum.

(CASE 60.) At two P.M., 17th December, 1832, I was requested by Mr. Skair to see a case of nates presentation. He had extracted the trunk and extremities, but the head could not be drawn through the external parts from the rigid state of the perineum, and the pulsations of the cord were becoming more and more feeble. So great was the resistance of the perineum, that it was impossible to overcome it without destroying the child. I pressed back its edge, however, so far that the external air could enter the mouth of the child, and it respired in this way fully twenty minutes after the pulsations of the cord had ceased. In spite of all our care, the edge of the perineum gave way as the bulky part of the head passed through the external parts, but the child sustained no injury, and continued to live. This method I have employed successfully in other cases.

(CASE 61.) On the morning of Tuesday, April 22d, 1836, I was called to a patient twenty years of age, who had been many hours in labour with her first child. The nates of the child presented, but could not be forced through the brim. With a blunt hook passed over one of the groins, the medical attendant succeeded, after employing great force, in bringing down the extremities and trunk through the pelvis. The head, however, remained immovably fixed above the brim; after repeated unsuccessful attempts to open it with the perforator, and being exhausted by efforts, continued for three hours, to extract the head, he requested me to assist in completing the delivery. I found the occiput at the back part of the pelvis, and the chin over the symphysis pubis, and the anterior surface of the thorax and abdomen twisted round towards the hollow of the sacrum. The perforator had been passed up behind the symphysis pubis, and had entered the neck of the fœtus near the angle of the jaw, and lacerated the parts around, but the point had not passed through the bones of the skull. I turned the body of the child round, so as to make the front of the thorax and abdomen look toward the symphysis pubis, and correspond with the face of the child. The fore and middle fingers of the left hand were then carried up along the spine of the child to the occiput, and the point of the perforator being slid along the inside of these, while the body of the child was drawn forward, the head was opened behind the right ear, and the brain began

to escape. The point of the crotchet being then introduced through the opening, and fixed on the base of the skull, the head was soon extracted. The child was putrid, and the patient died on the 28th, from extensive inflammation of the uterine organs and cellular membrane of the pelvis. The brim of the pelvis is of an oval form, and measures three inches from the sacrum to the symphysis pubis, and four inches and a half in the transverse diameter. The distance between the tuberosities of the ischia is three and a quarter. The false vertebræ are not completely united by bone, and the ossification of the other bones of the pelvis is imperfect. In this case all the consequences of distortion were produced, though it was merely a small pelvis, and had no apparent connection with softening of the other bones of the body from rickets. The bones of the extremities were not bent, and there was no external appearance from which the actual condition of the pelvis could have been known before the labour commenced.

(CASE 62.) I attended a lady in her first labour on the 22d October, 1837. The nates presented, and the cord ceased to pulsate, after the trunk and extremities of the child had been extracted. The perineum was so rigid, that the head could not have been delivered without using so much force that the parts must have been torn, and the neck of the child injured. I held the body of the child as far forward as possible, while Dr. H. Davies assisted me in holding back the perineum, that the air might enter the mouth of the child. The respiration went on for nearly half an hour before the head could be safely drawn into the world, and during the whole of the time there was no pulsation in the cord. The child is alive, and the perineum was not injured. On the third day after delivery, this lady was attacked with scarlet fever in a severe form, but she recovered completely.

(CASE 63.) On the 13th December, 1838, Mr. Marshall, of Greek-street, called me to a case in which the nates presented, or one of the feet. After the trunk and extremities had been extracted, Mr. Marshall could not get the head through the brim of the pelvis. I found the head so firmly fixed in the brim, that I could not succeed by all the force I could exert in drawing it into the cavity. As the child was dead, I passed up the perforator, and opened the head behind the ear, and then it was readily drawn through with the crotchet. Recovered.

(CASE 64.) February 22d, 1842, I saw a lady who had been thirty-six hours in her first labour. The os uteri was widely dilated. Foot and nates presented. The expulsion of the nates was left to nature; the upper extremities and head were extracted artificially by the medical attendant. The perineum was slightly torn. Child dead. It had been alive in the early part of the labour.

(CASE 65.) At one A.M. on the 8th January, 1842, Mr. Thompson called me to a case in Vere-street, in which the trunk and extremities of the child were delivered, but the head could not be drawn through the brim, which was contracted. The child being dead, I opened the head behind the ear, and putting the crotchet in the opening, easily extracted the head. The nates presented, and venesection had been performed in the first stage to relieve the rigidity of the os uteri.

(CASE 66.) On the 1st June, 1840, I was called to a case of twins, in which the face and funis of the first child presented, and the feet of the second. The labour being very protracted, the head of the first had been perforated, but could not be extracted. At nine in the evening, I first saw the case, and had some difficulty in delivering the head with the crotchet. The feet of the second presented, and I left the management of this to the gentleman in attendance. At five the next morning, I was again called to this case: the trunk and extremities had been delivered, but the head remained above the brim of the pelvis, though great and long-continued efforts had been made to extract it. By passing two fingers into the mouth, and pulling down the chin, the difficulty was readily overcome.

(CASE 67.) June, 1839, a lady who had suffered severely from distention of the uterus, and dropsy of the lower extremities in the latter month of pregnancy, was delivered of twins. The head of the first presented with the cord round the neck. The head of the second likewise presented, and the binder being applied, and the membranes ruptured, it was soon expelled by the natural efforts; both were alive. Before the placenta came away, profuse hemorrhage followed, which had nearly proved fatal in spite of every thing. For a few days she seemed to recover, but the pulse became very frequent, the head wandered, and she died nine days after, from some affection of the uterine veins. After delivery the peristaltic action of the intestines was distinctly seen through the abdominal parietes.

(CASE 68.) On April 7th, 1840, I was called by Mr. Skegg, St. Martin's-place, to a case of twins. The first child presented naturally, and had been expelled eight hours before I saw the patient. Eight scruples of the ergot of rye had been given, but no strong pains followed. The head of the second child presented, and the membranes were not ruptured. I discharged the liquor amnii, applied the binder, and gave stimulants, to make the uterus contract, which it did, and expelled the child in three hours. The vagina and cervix uteri were too much contracted in this case to admit of turning, which I would not have had recourse to, if they had been in a state of relaxation. The placenta were retained, and dangerous hemorrhage took place, but the patient recovered rapidly. In this case, as soon as it was ascertained that the head of the second child presented, the binder should have been firmly applied, and the membranes ruptured. No benefit can arise from delaying to do this in similar cases.

(CASE 69.) May 25th, 1842, the head of the first child presented, and it was expelled alive at eight A.M. The midwife soon discovered that there was a second child, but she did nothing for five hours. She then sent for an accoucheur, who introduced his hand as far as the wrist, and felt the head of the second child presenting, and did nothing more. There was no pain all this time. At twelve o'clock at night he returned, and found the midwife with the patient in the same condition. Her pulse being good, and spirits also, he told the midwife to remain with her, and let him know the result in the morning. At nine A.M. every thing remained as before, and he then requested me to say how long she ought to be left to nature. I thought she had been left twenty-four hours too long, and immediately went and ruptured the membranes, and did every thing in my power to make the uterus contract, which it soon did most powerfully, and a living child was expelled, and the placenta followed without hemorrhage. I can see no necessity for waiting more than an hour, or even so long, before rupturing the second bag of membranes.

(CASE 70.) At midnight, 21st June, 1842, Mr. F—— requested me to assist him with a case of twins. The presentation of the first was natural, and it was born without help. The arm of the second presented, and two hours had elapsed from the birth of the first before I saw the patient. The left arm was in the vagina, and the head to the left side of the uterus. I passed up the right hand between the child and

fore-part of the vagina and uterus, and soon laid hold of a leg, and turned and delivered with great ease, and the child was alive. The binder was firmly applied, and every other means had recourse to which could prevent hemorrhage. Recovered.

(CASE 71.) November 20th, 1838, the first child expelled, dead, and in a putrid state. The nates presented. Four hours after, the second child was born alive, the hand having come along with the head. Great hemorrhage followed, which was arrested by the removal of the placenta, the firm application of the binder, the dashing of cold water on the external parts, and internal stimulants. The placenta of the first child was in a yellow indurated state, with masses of coagulated blood contained in various parts of its interstices. The placenta of the living child was healthy. The ergot of rye was given in this case, but had no effect.

(CASE 72.) Several years ago, I saw a case of twins with Mr. Webster, of Connaught-terrace. During the latter months, the secretion of urine was scanty and albuminous, and diuretics had no effect upon the kidneys. Great œdema of the legs, thighs, and labia, took place, with urgent dyspnoea. Bloodletting, cathartics, and diuretics, were employed without any improvement, and when the symptoms became so urgent as to render delivery necessary, labour came on spontaneously, and twins were expelled. The kidneys began to secrete urine copiously within twenty-four hours, and in no long time the whole dropsical fluid effused had been removed. Another similar case has fallen under my observation.

(CASE 73.) July 5th, 1828, at Brompton, I saw a case of protracted labour, in which the head presented, with a large portion of the funis, which did not pulsate. The pains were feeble, and she seemed much exhausted, but before the arrival of the perforator, the child was expelled.

(CASE 74.) October 26th, 1828. A case occurred at 23, Peter-street. The head of the child was low down in the pelvis, and a large portion of the funis hanging out of the external parts, and pulsating. The case was left to nature, and the child was born alive, which I did not expect.

(CASE 75.) On the 2d November, 1838, Mr. Fincham, Spring-gardens, called me to see a case of labour, in which a great portion of the funis was prolapsed, and had not ceased to pulsate. The head was entirely above the brim, the os

uteri not fully dilated. The membranes burst two hours before, and for some time feeble pulsations were felt in the cord. When I saw the case, it was too late to think of turning, and had I seen it two hours before, soon after the membranes had given way, I would also have decided to leave the case to nature. In prolapsus of the funis there are few cases, if any, in which it is right to turn, and none after the liquor amnii has escaped, and where we have reason to believe that any considerable difficulty will be experienced in the operation.

(CASE 76.) On the 5th May, 1841, I saw a case of labour in which the cord was twice round the neck, and the trunk could not be delivered till the cord had been tied and divided in the vagina.

(CASE 77.) In a case of labour, the first stage was nearly completed before I could ascertain the nature of the presentation. I dreaded, from this circumstance, that the child was lying across the uterus, and that the operation of turning would be necessary. I called Dr. H. Davies into consultation, and he was of the same opinion, and considered it proper to interfere before the membranes gave way. I placed the patient on the left side, near the edge of the bed, laid bare the right arm, covered the hand with lard, and passed it slowly, in a conical form, into the vagina, and, in the absence of pain, through the os uteri. I was pleased to find that the head was the presenting part, and that turning was not necessary. On rupturing the membranes, the uterus soon contracted and expelled the child alive. The cord was twice firmly twisted around the neck.

(CASE 78.) In another private patient, the same circumstance occurred, not long after, and similar preparations were unnecessarily made for turning. The cord was twice around the neck.

(CASE 79.) On the 1st June, 1842, at midday, I saw a case at 12, Buckingham-place, Fitzroy-square, in which the head, the funis, and foot presented. Labour began the previous afternoon, and at six o'clock the liquor amnii escaped, and the midwife felt the head, a foot, and a great loop of the funis presenting. She thought "the foot should be put back," and this she attempted to do for six hours. At midnight she requested a surgeon to see the case, and deliver the woman, but he did nothing except administering two doses of ergot of rye. In this condition the patient

remained till twelve o'clock the next day, when I saw her. As there was no pulsation in the cord, the only matter for consideration was how the patient might be relieved with the least risk. I passed up my hand into the vagina, grasped the foot, and brought down the nates, while at the same time I pushed the head aside and easily delivered.

(CASE 80.) At two A.M., 8th September, 1842, Mr. Crellin called me to a case at Portland Town, in which the left arm and funis, without pulsation, presented. The liquor amnii had escaped forty-eight hours before, and Mr. Crellin then found the os uteri so rigid, that turning was impossible. I passed up my right hand between the front of the pelvis and the fœtus, along the arm, shoulder, and trunk, till I reached a foot, but the uterus was grasping the child so firmly, that I had great difficulty in seizing the foot and bringing it into the vagina; and when this had been done, still greater difficulty in getting the shoulder out of the brim, and the nates into it. Even after a tape had been put round the ankle, and long and strong traction made upon the thigh, the version could not be completed, till the left hand was passed up into the uterus, and the other foot brought down. The patient is recovering favourably.

(CASE 81.) September 16th, 1842. Liquor amnii discharged twenty-four hours; an upper extremity in the vagina; labour-pains only a few hours. Both feet brought down into the vagina. Version could not be completed till a tape had been passed around the ankles. Recovered.

(CASE 82.) October 25th, 1842. Twins; arm of second presented. Turning easily accomplished. Child alive. Recovered.

(CASE 83.) November 19th, 1842. Left arm in vagina; liquor amnii not completely discharged; uterus contracting, but not forcibly, around the child. Great difficulty in passing the hand into the uterus; obliged repeatedly to change the hands. The chief difficulty arose from the head lying on the fore-part of the pelvis. Difficulty in turning after the foot had been grasped. Child dead. Mother recovered.

(CASE 84.) February 16th, 1843. Shoulder and arm presenting. A foot brought down into the vagina, but the version could not be completed. On putting a tape round the ankle it was soon completed. Recovered.

(CASE 85.) April 9th, 1843. Presentation of the superior extremity of a premature and dead fœtus. Turning accomplished without much difficulty. Recovered.

(CASE 86.) April 31st, 1843. Presentation of head, arm, and funis, without pulsation. Perforation of the head and extraction with the crotchet. Recovered.

(CASE 87.) June 20th, 1843. Labour very protracted. Twins. Head and hand of the first presented; forehead to the pubes delivered with the forceps. An arm of second child felt through the membranes. Turning immediately performed. Both alive. Recovered.

(CASE 88.) July 25th, 1843. The head, arm, and funis presented of a dead and premature child. By pulling upon the arm, easily extracted, doubled. Recovered.

(CASE 89.) August 1st, 1843. A patient of the St. Marylebone Infirmary. First child. Membranes ruptured seven days; liquor amnii gone; great rigidity of external parts. Left shoulder and arm low in the vagina. Uterus contracting so firmly around the body of the child, that the hand could not be passed in any direction into the uterus. Shoulder and arm drawn down to deliver by forced evolution. The hand at last introduced, and the feet brought down, and the delivery completed. Recovered.

(CASE 90.) November 1st, 1843. In labour forty-eight hours before the presenting part was ascertained. Right arm and shoulder in the vagina; liquor amnii gone. An experienced accoucheur had spent four hours in attempting to turn. He had removed the arm at the shoulder-joint, and perforated the thorax, but was so exhausted that he could not complete the delivery. I made repeated but unsuccessful efforts to introduce my hand, then tore open the thorax and abdomen with the crotchet, and fixing its point on the spine, dragged the pelvis and lower extremities forward, and delivered.

(CASE 91.) November 2d, 1843. An arm and foot of a premature child fourteen hours in the vagina. Attempts made to bring down the foot unsuccessful. Effected readily after a tape had been put around the ankle. Recovered.

(CASE 92.) 16th May, 1843. Tedious labour. Membranes ruptured; a great loop of the funis pulsating hanging through the os uteri, which was not fully dilated. Labour continued eight hours longer without interference. Child born alive. Mother recovered.

(CASE 93.) 12th March, 1844. Presentation of a foot and a loop of the funis without pulsation. Child premature, and putrid. Os uteri long dilated to the size of half-a-crown,

and liquor amnii discharged. Laid hold of the foot and thigh, and slowly extracted. Placenta followed. Recovered.

(CASE 94.) 11th October, 1844. Liquor amnii discharged ten hours. Presentation of a superior extremity. Unsuccessful attempts to turn. I found the left arm hanging out of the vagina, and the uterus firmly contracted. Made an unsuccessful attempt with the right, then seized the foot with the left hand, and brought it into the vagina. Version not completed without the assistance of the tape around the ankle. Recovered.

(CASE 95.) 17th January, 1845. Forty-eight hours in labour. Unsuccessful efforts to turn. The right arm of the child hanging through the external parts. Uterus not contracting forcibly. Passed up my right hand, and turned without much difficulty. Adherent placenta. Recovered.

(CASE 96.) March, 1845. Twins; shoulder of the first presented; supposed to be the breech. Two unsuccessful attempts to turn. Little difficulty experienced in bringing down the feet. Child alive. Head of second child presented, ruptured the membranes, and brought down the feet. Child dead. Mother recovered.

(CASE 97.) 28th September, 1846. First child. Seventh and half month of pregnancy. Liquor amnii long escaped. Left arm hanging out of the external parts. Shoulder low down. Efforts to turn made unsuccessfully. Endeavoured to pass my hand into the uterus, but could not, from the violence of the contractions. Passed up the crotchet, and pulled down the nates and lower extremities. Recovered.

(CASE 98.) 1st October, 1846. Distortion of pelvis. Punctured the membranes in the eighth month of fifth pregnancy. Pains commenced on the 3d. Presentation of the nates. Spontaneous rupture of the uterus on the 4th, and escape of the foetus into the sac of the peritoneum. Sudden death.—6th. Uterus found inverted, and hanging out of the vagina between the thighs. When raised, a stream of gas rushed through a rent in the back part of the cervix. Peritoneal sac distended with gas. Body putrid.

(CASE 99.) 7th November, 1846. Membranes ruptured twelve hours. Shoulder presenting. Unsuccessful attempts to turn. I found both arms in the vagina, the head at the brim. Little or no active uterine contraction. Turning accomplished in the usual manner with great ease. Recovered.

(CASE 100.) December, 1846. Presentation of the nates. Os uteri partially dilated. Complete exhaustion. Extraction with the blunt hook passed over the groin. Recovered, with slight laceration of the perineum.

(CASE 101.) 13th December, 1846. Twins. First child born six hours before, naturally. The shoulder of the second presented. Strong uterine contractions. Repeated unsuccessful efforts to turn. Found the right arm hanging out of the vagina, and the left arm blocking up the passage. Drew down the right arm, and afterwards with my left hand reached the fundus uteri, and got hold of a knee, and turned, at the same time pushing back the shoulders. Recovered.

FIFTH REPORT.

THE HISTORIES OF SIXTY-TWO CASES OF PLACENTAL PRESENTATION.

(CASE 1.) Anne Cromer, æt. forty-two, July 22d, 1828. St. James's Parochial Infirmary. Mr. Baker called me to see this patient, who was far advanced in pregnancy and had been attacked with profuse uterine hemorrhage a week or ten days before. The placenta was felt adhering to the neck of the uterus, but the orifice was so rigid and undilated that turning could not be performed. For several days a plug was kept in the vagina, but a large quantity of blood was lost before the os uteri was in a condition to allow the hand to be passed. The delivery was at last accomplished without the use of much force, but a great discharge of blood took place before the uterus could be emptied, and the most alarming exhaustion followed. Until the 2d of August she suffered from headache, intolerance of light, dyspnœa, and fever; afterwards pain in the chest, increased dyspnœa, with purulent and fetid expectoration, took place, and she died on the eighteenth day after delivery without ever having complained of pain in the abdomen. On inspecting the body we found the effects of extensive inflammation of the pleura on the left side, and a portion of the left inferior lobe of the lung in a state of perfect gangrene. On opening the abdomen, there was no diseased appearance visible in the sac of the peritoneum, and the uterus was reduced in size as much as it usually is three weeks after delivery. Mr. Baker concluded that the uterus was perfectly healthy, and had nothing to do with the gangrene of the lungs. A case of uterine phlebitis

which I had observed some time before, led me to suspect that the source of the mischief existed in the uterus, and I proceeded to examine it. Pus flowed from one of the veins of the upper part of the uterus on the left side, when cut open, and this inflamed vein was traced to an abscess in the left ovarium, and to the left spermatic vein, the coats of which were contracted and thickened, and its inner surface lined with lymph. The whole spermatic vein was inflamed, from the uterus to its junction with the left renal vein, the coats of which were also thickened and lined with lymph. From this case it appeared that hemorrhage was not the only danger to be apprehended where the placenta adhered to the neck of the uterus.

(CASE 2.) A patient of the British Lying-in Hospital, near the full period of pregnancy, was suddenly attacked with a profuse discharge of blood from the uterus. She had been exposed to no accident, and had not experienced any uneasy sensation about the uterus, before the blood began to flow. She was conveyed from her residence to the hospital immediately after the occurrence, but she was dead before any of the medical officers of the institution could see her. I examined the body, and found the centre of the placenta over the centre of the internal orifice of the neck of the uterus. On the left side the connection between the placenta and uterus was broken to a considerable extent.

(CASE 3.) 24th October, 1829. A woman in the seventh and half month of pregnancy, residing at 2, Parker-street, had a great discharge of blood from the uterus for thirty-six hours before I saw her. A large portion of the placenta was hanging through the os uteri into the upper part of the vagina. I proposed immediately to deliver by turning the child, but she obstinately refused to submit to the operation, and I was apprehensive that she would die undelivered. The hemorrhage continued with great violence for several hours, when the placenta and a dead fœtus were expelled without assistance. She remained long in a state of great exhaustion, but ultimately recovered.

(CASE 4.) On the 8th February, 1830, I was called to a woman residing in Falconberg-court, who had been attacked with profuse uterine hemorrhage at the end of the seventh month of pregnancy. The placenta was protruding through the orifice of the vagina. I immediately extracted it, and a dead child followed. A great hemorrhage succeeded, and

she remained for a considerable time insensible, without any pulse to be felt at the wrists. She, however, gradually recovered.

(CASE 5.) On the 24th of March, 1835, I was requested by Mr. French, surgeon to the St. James's Parochial Infirmary, to deliver a patient of the institution, who had uterine hemorrhage, with presentation of the placenta. A great quantity of blood had escaped, and she was much exhausted. The os uteri being soft and largely dilated, I immediately proceeded to deliver by passing the right hand into the uterus, through the opening made by the detachment of the placenta from its cervix, and by rupturing the membranes, and turning the child. No difficulty was experienced in extracting the trunk; the head and superior extremities of the child and the placenta soon followed. The hemorrhage immediately ceased, and the recovery was rapid. The child was dead. Nothing could be more easy than the operation of artificial delivery in this case, and its performance required only a few minutes. I was called to it from the Medico-Chirurgical Society, and returned before the meeting broke up.

(CASE 6.) A few days after the preceding case, I was consulted by the late Mr. Gosna about a patient in the eighth month of pregnancy, who had flooding from attachment of the placenta to the lower part of the uterus. A large quantity of blood had been lost, and it was evident, from the effect produced by this upon the system, that she would speedily sink, if artificial delivery were not at once performed. The orifice of the uterus was widely dilated, and a large mass of the placenta detached was distinctly felt through it. The operation of turning was immediately performed, as in the last case, the hand being passed up into the cavity of the uterus at the part where the separation of the placenta from the cervix had taken place. The placenta was soon after removed, and the hemorrhage did not return. The child was still-born. The mother recovered rapidly.

(CASE 7.) On the 26th April, 1835, I was called to a patient of the St. Marylebone Infirmary, who was more than seven months pregnant, and had been attacked fourteen days before with alarming uterine hemorrhage. The first discharge of blood took place during the night, when she was at rest: it was not preceded by a sense of uneasiness about the uterus, and could be referred to no accident or injury of any kind.

A considerable oozing of blood still continued when I first saw her. The placenta presented ; the orifice of the uterus was opened to the size of a crown-piece, but its margin was so hard and undilatable, that I found it impossible, without employing too great force, to pass the hand into the uterus. After a cautious trial for about half an hour, to get the hand insinuated through the orifice, I was compelled to withdraw it altogether, as there was no hope of overcoming the resistance. On the 27th, the flow of blood continued ; the strength remaining unimpaired, and the os uteri being not less unyielding, I resolved to wait till relaxation should take place, and moderate the discharge by the recumbent position, and the application of cold externally and internally. 28th. A large quantity of blood suddenly escaped, which produced complete syncope. The countenance was afterwards pale, the extremities cold, and the pulse rapid and feeble. The os uteri being soft and dilatable, I immediately passed up the hand and delivered by turning. The child was born alive. The placenta was removed soon after ; but though no further loss of blood was experienced, the patient continued gradually to sink, and died in a few days.

(CASE 8.) On the 7th October, 1835, I was requested by Mr. Gairdner, of Foley-place, to see a patient, residing in Frith-street, who had completed the seventh month of pregnancy, and had been attacked with uterine hemorrhage three weeks before. A slight discharge of blood had continued during the whole of this period, but it had produced little effect upon the system until a few hours before I saw her, when several pints of blood were suddenly discharged, and her whole strength seemed at once extinguished. The pulse was not perceptible ; the extremities were cold, and the respiration feeble. The blood still continued to flow in great quantities, and it was evident death would soon take place if the uterus were not speedily emptied of its contents. The os uteri was not dilated to the size of a crown, and it was so rigid, that I found it absolutely impossible, though I employed a degree of force scarcely justifiable, to pass more than three fingers within it. The whole hand could not be made to pass, though it appeared certain that death would soon take place, if delivery was not immediately accomplished. On the fingers being withdrawn for a short time the flooding continued. I made another effort to turn the child, but the resistance could not be overcome. I then pressed forward

the fore and middle fingers of the right hand between the placenta and uterus, so as to reach the membranes, which I succeeded in tearing open. Pressing the fingers still forward, they came in contact with one of the feet, which they grasped and brought down into the vagina. This was pulled lower and lower, till the whole extremity and nates were drawn into the os uteri; but so rigid did it continue to be, that although I exerted all the force I dared employ in dragging it down, half an hour elapsed before the pelvis of the child could be made to clear the orifice of the uterus. At last it was extracted, with the placenta, and the hemorrhage ceased. A violent rigor followed, which threatened for a time to destroy the patient. Bottles of hot water were applied to the feet and pit of the stomach, the whole body was covered with hot blankets, and brandy was liberally administered. She slowly recovered from the effects of the immense loss of blood.

(CASE 9.) On the 18th October, 1835, Mrs. Ryan, whose pelvis is greatly distorted by rickets, was attacked suddenly with profuse uterine hemorrhage in the eighth month of pregnancy. I had delivered her once by craniotomy, and induced premature labour five times. She refused to submit to the operation on this occasion. On examination, at four o'clock the following morning, a large portion of the placenta was felt detached, and protruding through the os uteri. The orifice, though not much dilated, was in a state to admit of artificial delivery; but so great was the distortion of the pelvis, that I found it impossible to introduce the hand within the pelvis to turn the child. The flooding still continued. There were no labour-pains. I could feel the head above the brim of the pelvis, and I determined to endeavour to open, and extract it with the crotchet. Mr. Brookes, surgeon to the British Lying-in Hospital, pressed hard over the fundus uteri, while I pushed forward the fore and middle fingers of my left hand to the head, which I could scarcely touch. In the groove formed between these fingers, the point of the perforator was conducted to the head, and pressed steadily through the integuments and bone, and then the blades were opened. The undilated state of the orifice rendered this difficult, but it was accomplished without inflicting any injury on the orifice. The crotchet was then introduced into the opening in the skull, and the head was

dragged down between the placenta and uterus into the brim of the pelvis, where it stuck fast for a long time. The orifice of the uterus was still imperfectly dilated. After four hours' very hard work, we succeeded in getting the base of the skull through the brim into the cavity of the pelvis, and delivered. The placenta was removed soon after the child, and no hemorrhage followed. This woman recovered in the most favourable manner, and she has since had premature labour induced five times at the end of the seventh month of gestation.

(CASE 10.) At six A.M., 28th October, 1835, I was called by Mr. Cathrow, of Weymouth-street, to a patient, seven months pregnant, who had been attacked with uterine hemorrhage fourteen days before. It had occurred spontaneously: it returned slightly a week ago, and again went off. This morning it was renewed with increased violence, and was accompanied by labour-pains. Mr. Cathrow examined, and found the placenta protruding through the os uteri. He drew it forward gently, and the whole ovum escaped without rupture of the membranes. The flooding ceased on the application of cold vinegar-and-water to the external parts, and she was soon quite well. A similar accident had occurred to her in a former pregnancy.

(CASE 11.) At eleven A.M., on the 30th October, 1835, I was requested by Mr. Crellin, Wellington-road, to see a patient, æt. forty, who was in the ninth month of pregnancy, and for fourteen days had suffered from slight uterine hemorrhage. On the 29th, and morning of the 30th, it greatly increased, and was accompanied by alarming fits of faintness succeeding each other rapidly. I found the os uteri dilated to about the size of a crown-piece, and rigid. The placenta, partially detached, was felt at the posterior part of the neck of the uterus. The membranes were distinctly felt at the anterior part, and the head of the fœtus presenting above them. The pulse was neither rapid nor feeble, and the strength did not seem much impaired; the operation of turning, if practicable, did not appear to be necessary in this case. I endeavoured with the nail of the forefinger to tear the membranes, and believed I had done so, but was mistaken; the hemorrhage soon returned, when three doses of ergot of rye were administered by Mr. Crellin; but though pains were produced, the hemorrhage continued, and at four P.M. I discovered that the membranes were entire, and that no

liquor amnii had escaped. I drew the nail like a saw for some time over a portion of them, and at last the liquor amnii began to escape in large quantity, and strong uterine contractions followed. The head of the child was soon pressed down between the anterior portion of the neck of the uterus and the placenta, where the separation had taken place, and the labour was safely completed in an hour. There was no hemorrhage after the membranes had been perforated. The child was dead. This patient had not recovered from the effects of the loss of blood for several weeks, and for several months a constant sanguineous discharge from the uterus remained.

In several other cases similar to the preceding, of partial placental presentation, the membranes were ruptured, and the delivery safely completed, without the operation of turning.

(CASE 12.) On the 10th of November, 1835, I was requested by Dr. N. Grant to see a woman residing in Lower James-street, who had been suddenly attacked with profuse uterine hemorrhage in the eighth month of pregnancy. Six days before, without any accident, when she had gone out to market, a great gush of blood took place from the uterus, which produced faintness. No fresh discharge occurred till this afternoon, when another immense flow of blood took place, and complete prostration of strength followed. When Dr. Grant was called to her at half-past three P.M., the hemorrhage continued, and she was almost completely insensible, with cold extremities and a rapid feeble pulse. He found the placenta presenting. At four P.M. the flooding continued. The vagina was partially filled with clotted blood. On passing up the hand, I found the placenta adhering all round to the neck of the uterus. There was no point where the organs were completely separated from one another, where the hand could be readily introduced into the cavity of the uterus. Though the os uteri was considerably dilated, I found, on attempting to pass the hand, that it offered great resistance. This was, however, gradually overcome, and the fingers were slowly insinuated behind, between the uterus and placenta, into the cavity, and the membranes were ruptured, and the child speedily delivered by turning. The placenta came away soon after, and an immense flow of blood took place immediately after from the vagina. This was soon checked by the external application

of cold, and the introduction of the plug ; but the pulse became imperceptible, the face covered with a clammy perspiration, the lips and hands livid, breathing hurried, with great restlessness, and she died two hours after. Stimulants were wholly ineffectual in this case.

(CASE 13.) St. Marylebone Infirmary, 17th Nov., 1835. A young married woman, in the eighth month of her second pregnancy, was brought last night into the lying-in ward, in consequence of an attack of uterine hemorrhage. She reported it to have been produced by great bodily exertion the preceding day. The hemorrhage had almost entirely ceased on the 16th. At two P.M. on the 17th, I examined, and found a portion of the placenta detached within the orifice of the uterus. The os uteri was slightly open and rigid, pulse not feeble, faintness entirely gone. As she was not in a condition to admit of artificial delivery, rest in the recumbent position, cool air, &c., were recommended until the circumstances should justify interference. 18th. The hemorrhage returned, and the edge of the placenta being distinctly felt passing into the membranes, they were ruptured, and the liquor amnii discharged. Labour-pains soon came on, and a dead child was pressed down between the uterus and placenta, where they had been separated. The placenta was extracted soon after, and the hemorrhage did not return. This woman died soon afterwards from deep-seated inflammation of the uterus.

(CASE 14.) I was requested by Dr. Boyd, St. Marylebone Infirmary, to see a patient belonging to the institution, who had been attacked on Christmas-day, 1836, with uterine hemorrhage during a severe fit of coughing. It disappeared without producing faintness, but returned thrice to a much greater extent, and produced a marked effect upon the constitution. The countenance, when I first saw her, was pale, the hands cold, the pulse rapid and feeble, and a considerable hemorrhage still continued. There were no labour-pains. The movements of the child had been recently felt. The os uteri was so much dilated, that the points of four fingers and the thumb could be readily passed into it. The circumference was not thin, but it was soft and dilatable, and I experienced no difficulty in introducing the hand between the anterior part of the orifice and the detached placenta, a portion of which was hanging into the vagina behind. Before the whole hand entered the cavity of the uterus, or the mem-

branes were ruptured, I grasped one of the feet. The operation of turning was easily completed, and the child was born alive. The binder had been applied around the abdomen before the operation began, and it was tightened several times during the progress of it. I left the placenta for some time in its situation after the extraction of the child, to produce the effect of a plug. It was afterwards removed without difficulty when the uterus had contracted, and the patient recovered in the most favourable manner.

(CASE 15.) March 24th, 1836, I was requested by Mr. Saunier, to see a patient seven months pregnant, who, after suffering several days from uterine hemorrhage, was suddenly reduced to a state of the most alarming weakness, from a great gush of blood taking place. When I saw her the blood was flowing copiously. The placenta could be felt adherent at the back part of the cervix uteri; at the fore part I felt the membranes. The orifice was so rigid, that it was impossible to pass the hand into the cavity of the uterus to turn. I ruptured the membranes, and a great quantity of liquor amnii escaped, after which the flooding entirely ceased. The ergot of rye was given, but labour-pains did not come on till the afternoon of the 26th, the second day after the membranes had been ruptured, when the child and placenta were expelled without a renewal of the hemorrhage. On the 28th she had violent rigors, with headache, delirium, and a rapid, feeble pulse. Symptoms of uterine phlebitis manifested themselves in a few days, and she died on the 11th April, from inflammation of the lungs. For a week before death, she suffered excruciating pains in the right shoulder-joint and arm.

(CASE 16.) May 12th, 1838, I was requested by Mr. Kennedy, Tavistock-square, to see a patient who had awoke in the morning, greatly alarmed by a discharge of blood from the uterus. The quantity lost had not been great, and the strength of the constitution was unimpaired. The orifice of the uterus was high up, and slightly open. I felt the placenta at the cervix. There were no labour-pains. Delivery was considered inadvisable at the time. 15th. Hemorrhage has continued, but not profusely, until this morning, when a great quantity of blood suddenly escaped, and she became extremely faint. There were no pains. The os uteri was largely dilated. I introduced the fingers of the left hand through the os uteri, and before the whole hand

had passed into the cavity, I was able to lay hold of one of the feet, and turn the child. The child was dead. The placenta was extracted soon after, and the flooding ceased. She recovered favourably.

(CASE 17.) On the 3d December, 1836, I was called by a medical practitioner to a patient seven months pregnant, who had been attacked on the morning of the previous day with uterine hemorrhage. It returned twice in the course of the day, and again ceased without producing any great effect upon the constitution. The ergot of rye was repeatedly given without any attempt being made to ascertain whether or not the placenta presented. At one A.M., when I first saw the patient, the extremities were cold, and pulse scarcely to be felt. She was extremely faint. The os uteri was widely dilated, and a large portion of the placenta felt at the posterior part of the cervix. The operation of turning was easily performed, and did not last five minutes. The child was dead. The uterus having contracted, the placenta was removed in half an hour after the child. No hemorrhage followed. For three days she appeared to be recovering. Rigors, urgent thirst, pyrexia, pain in the loins and right side of the abdomen took place, and she died about ten days after with the usual symptoms of inflammation of the veins of the uterus.

(CASE 18.) On the 20th December, Mr. ——— requested me to see a patient residing in Lower Eaton-street, who had been attacked with repeated discharges of blood from the uterus in the eighth month of pregnancy. The placenta was felt through the orifice of the uterus. The bleeding had produced great exhaustion, yet the orifice of the uterus was not in a condition to admit of artificial delivery. For some days the hemorrhage was controlled, but it returned with great violence, and Mr. ——— passed up the hand into the uterus, and delivered the child alive. The placenta soon came away, and she appeared for two hours to recover, and then suddenly expired without any further loss of blood.

(CASE 19.) March 10th, 1837, I was called to see a patient who had been attacked with profuse uterine hemorrhage four weeks before, when at the end of the sixth month of pregnancy. It had returned at intervals, but in a slight degree. During the preceding night, a large quantity of blood had escaped. Twenty grains of the ergot of rye had been administered about half an hour before I saw the pa-

tient, although no examination had been made to ascertain the actual state of the case. Pain followed the ergot, and a great increase of the discharge. I found the orifice of the uterus soft, and widely dilated, and a large portion of the placenta hanging through it, detached from the cervix. I passed up the hand readily into the uterus, and laid hold of one of the feet of the child before the membranes were ruptured. The child was extracted alive without difficulty. The placenta was left as a plug till the uterus had contracted. The patient speedily recovered. Ergot should never be given in hemorrhage till the fact is determined that the placenta is not attached to the neck of the uterus. It can do no good in presentation of the placenta.

(CASE 20.) July 19th, 1837. Mr. Tucker, of Berner's-street, requested me to see a patient in St. Martin's-lane, who had presentation of the placenta, and was reduced to a state of extreme exhaustion by the loss of blood. She was near the full period of pregnancy, and during the preceding seven days had, at short intervals, lost a large quantity of blood. I passed the hand readily through the orifice of the uterus, though it was not dilated more than inch and a half in diameter, and after rupturing the membranes, grasped the feet of the child and delivered without difficulty. The placenta was not removed for a considerable period. No hemorrhage followed, and the patient recovered after a severe attack of uterine phlebitis.

(CASE 21.) On the 27th December, 1837, I saw a case of uterine hemorrhage in the ninth month with Mr. Bushell. He felt the placenta adhering to the neck of the uterus. I examined, and found the orifice a little dilated, and the placenta within, but was not able to feel its edge. The discharge had not been very great, had occurred only once, and had produced no effect on the constitution. The following day labour-pains came on, and when I examined, the os uteri was widely dilated, and the head pressing through the os uteri into the vagina; the membranes were immediately ruptured, and in a short time a living child was expelled with the cord twice round the neck. The placenta soon came away, and the hemorrhage which followed was soon checked.

(CASE 22.) June 11th, 1838. Dr. Boyd sent to request me to attend an out-patient of the St. Marylebone Infirmary, who had been attacked five days before, while in the seventh

month of pregnancy, with uterine hemorrhage. A great quantity of blood had been lost, and the discharge going on rapidly, with frequent fits of syncope. Dr. Boyd proceeded to deliver by turning. I saw her soon after, when the placenta had been removed, and the hemorrhage had ceased. There was still great faintness, the extremities were cold, and the pulse scarcely perceptible. She recovered from the immediate consequences of the hemorrhage, but afterwards died with all the symptoms of suppuration of the uterine veins.

(CASE 23.) On the 12th January, 1839, Mr. Jones, of Carlisle-street, Soho-square, called me to see a lady in the eighth and a half month of pregnancy, who had been attacked with uterine hemorrhage a month before. It first took place without any accident or pain, and the quantity lost was about half a pint, and it produced little effect upon the constitution. She remained quiet for several days, and then got up, and only felt a little weak. For ten days she went about, but the hemorrhage returned on the fifteenth day after the first attack, but not to a great extent. Seven days after this, a third and more profuse hemorrhage took place. It gradually went off, but not so quickly as the other attacks. At one o'clock, 12th January, it was renewed to an alarming extent without any pain; about a quart of blood was suddenly lost, and she became extremely faint. At four A.M. the discharge still continued. When I first saw her, at seven o'clock, she felt faint, and the pulse was rapid and feeble. The upper part of the vagina was filled with a large clot of blood, which adhered to the os uteri. By displacing this at the back part, I could distinctly feel the placenta adhering all round to the neck of the uterus, which was thick and rigid, and very little dilated. The effect produced by the hemorrhage was so great, that it was evident death would soon take place if the delivery were not speedily completed; and the state of the orifice was such, that it was certain the hand could not be passed but with the greatest difficulty. At eight o'clock, Dr. Merriman saw her with us, and agreed that immediate delivery was necessary. I passed the right hand into the vagina, and insinuated my fingers between the uterus and placenta at the back part, and reached the membranes. But the rigidity of the orifice was so great, that though I employed great force for a considerable time, I could not succeed in getting the hand into the uterus. Dr. Merriman re-

commended rupturing the membranes, and I was proceeding to do this with the fingers, when I felt one of the feet of the child, which I grasped, and brought down into the vagina enveloped in the membranes, which then gave way. Nearly half an hour elapsed before the version could be completed, and when it was effected, the neck of the uterus grasped the neck of the child so firmly, that I experienced the greatest difficulty in extracting the head, and not till I had made pressure for some time with the finger, and dilated the orifice of the uterus. A great discharge of blood instantly followed, the placenta was removed, and every means employed to stop the hemorrhage, but the breathing became hurried, the extremities cold, and she died in less than an hour after delivery. Dr. Merriman informed me, that a patient of his had actually died under similar circumstances before the head could be extracted. He considers the tampon as of little or no use in such cases.

The next case of hemorrhage from placental presentation, which I shall relate, occurred to Dr. H. Davies and myself more recently, and the circumstances were, if possible, still more distressing and unfortunate.

(CASE 24.) Mrs. H. was attacked with uterine hemorrhage at the beginning of February, 1839, when seven and a half months pregnant. About twelve days after, it returned a second time, and subsequently a third time. About half-past twelve on the 5th March, Dr. Davies requested me to see her with him, as the hemorrhage had returned in a dangerous form, and the orifice of the uterus was not in a condition to admit of delivery. We found the placenta adhering all round to the neck of the uterus, the orifice rigid and undilatable, and open to the extent of a crown. The head of the child presenting. By cold applied externally and internally, the hemorrhage was restrained till six o'clock in the morning, when it was renewed with violence. Dr. Davies then pressed his fingers through the placenta, tore it in two parts, and perforated the membranes. Half-past eight A.M., no hemorrhage. Slight pains. Eleven A.M., no flooding. Head pressing into the orifice of the uterus. We were prevented at the time from perforating and extracting the head, by the rigid state of the os uteri. She seemed to regain strength during the day, but at ten in the evening, without any further loss of blood, she began to breathe with great difficulty; the lips were livid, the hands and feet cold, and

it was evident she would soon die undelivered, if we did not interfere. I opened the head, and extracted it with the greatest difficulty, in consequence of the firm and rigid state of the os uteri. The operation was scarcely completed before she was dead.

(CASE 25.) At two o'clock in the morning, 30th July, 1839, Mrs. R——, æt. forty, 9, Hadlow-street, Burton-crescent, was suddenly attacked with a profuse hemorrhage. She was seven months pregnant, and perfectly well till the flooding commenced. I saw her at half-past ten A.M., when the os uteri was dilated to the size of half-a-crown, but thick and rigid. The placenta was adhering nearly all round to the cervix, the hemorrhage continued, and she was very faint. I endeavoured to pass the whole hand into the uterus to deliver, but found it impossible to introduce it. The fore and middle fingers were, however, easily passed up between the placenta and uterus on the fore part, and with these, before the membranes were ruptured, I seized a foot and brought it into the vagina, and soon extracted the child, which was dead. The placenta followed, and there was no further hemorrhage, and the recovery was rapid.

(CASE 26.) On the 22d February, 1840, I examined the body of Mrs. Cook, æt. thirty-three, who had resided in John-yard, Lisson-grove. A great uterine hemorrhage had taken place spontaneously, six weeks before, when she was seven months pregnant. Another took place on the 19th February, which continued till the evening of the 21st, when her medical attendant, with some difficulty, introduced the hand into the uterus, perforated a portion of the placenta, and turned the child. The head was extracted with difficulty. The placenta soon followed, but she soon after began to sink, and died in an hour and a half. There was an extensive laceration in the mucous and muscular coats of the cervix uteri, on the left side, and a smaller and more superficial rent on the right side. The placenta had adhered to the whole circumference of the cervix. The pelvis measured only two inches and three-quarters from the base of the sacrum to the symphysis pubis. It was the fourth time she had been pregnant. Labour had come on spontaneously at the seventh month of her first pregnancy, and the child was born alive, and has been reared. She went to the full period with her second child, and was delivered by craniotomy. Premature labour was induced at the seventh month

of her third pregnancy, but the child was born dead. Case 181 resembles this case, in the distortion of the pelvis being complicated with uterine hemorrhage from attachment of the placenta to the neck of the uterus.

(CASE 27.) On the 9th October, 1840, Dr. Scott, of Barnes, requested me to see a lady in the seventh month of pregnancy, who had been attacked in the morning with profuse flooding. For several days before she had suffered from sense of weight and uneasiness about the uterus. The edge of the placenta was distinctly felt by Dr. Scott, and he ruptured the membranes, and left the case to nature. We considered it unnecessary to turn the child. Strong labour-pains having immediately followed, a dead child was expelled in an hour, and soon after the placenta, without a renewal of the discharge. The recovery was rapid and complete.

(CASE 28.) Mr. Hill, of Guildford-place, requested me to see a lady on the morning of April 7th, 1841, who was in the eighth month of pregnancy, and who a month before had hemorrhage from the uterus, but not very profuse. On the 3d of April, a great gush of blood took place during some bodily effort, but she did not faint, and she went about again till the morning of the 7th, when an immense discharge took place, followed by faintness, coldness of the extremities, and great rapidity and feebleness of the pulse. The os uteri was thick, and so high up, and so little dilated, that it was with the utmost difficulty I could pass the fore and middle fingers within it. At first I thought it was the smooth membranes I touched, and I tried to rupture them, but the sudden gush of blood which followed soon led me to push the inquiry further, and to ascertain that the placenta adhered all round the cervix, as Mr. Hill at first believed. A more unfavourable case for the operation of turning could not have occurred, yet its immediate performance was necessary, to prevent death taking place without delivery. The whole hand was passed into the vagina, but only the fore and middle fingers could possibly be introduced between the placenta and uterus. After great exertion I succeeded, with these, in drawing down a foot into the vagina, and after long-continued efforts, extracted the trunk and head of the child. The os uteri seemed at first to grasp the neck with a deadly force which could not be overcome, but it ultimately yielded and allowed the head to pass. The placenta was detached, and soon came away, and no hemorrhage followed. The

pulse could scarcely be perceived for many hours after, but the circulation in the extremities was gradually restored, and she recovered.

(CASE 29.) April 15th, 1842, the same patient being in the sixth month of pregnancy, hemorrhage took place, and the placenta was found partially adherent to the cervix. The membranes being ruptured, a dead child was soon expelled without turning.

(CASE 30.) On the 19th May, 1841, an experienced practitioner requested me to see a patient who was in the seventh month of pregnancy, and who had been attacked with uterine hemorrhage three weeks before. It was profuse, but ceased, and did not return till the evening of the 17th May, when it induced great faintness. It had not entirely ceased when I saw her two days after, and she was faint with a feeble rapid pulse. The os uteri was open to the size of a crown, and the placenta adhered nearly all round to the cervix. Immediate delivery being necessary, the hand was passed up without much difficulty between the placenta and uterus, and delivery accomplished by her accoucheur in a quarter of an hour. While extracting the child, there was a convulsion fit with foaming at the mouth. Another convulsion fit soon followed the delivery, with jactitation, vomiting, and inclination to sleep, and she died in less than four hours.

(CASE 31.) Mr. Jonson, of Grosvenor-street West, took me, on the 26th May, 1841, to see a case of uterine hemorrhage in the eighth month of pregnancy, from placental presentation. The first attack of flooding had occurred spontaneously, three weeks before, without any pain. It had returned several times, but not very profusely. The os uteri, high and rigid, was open, to the size of half-a-crown, and the placenta was adherent all round, except at one point, where it had been detached. In the evening a sudden gush of blood took place, followed by great faintness. The delivery was immediately effected by passing the hand between the detached portion of placenta and uterus, and turning the child. The hemorrhage ceased, and the patient speedily recovered.

(CASE 32.) On the 10th November, 1841, I was called by Mr. Roach to a case of sudden and profuse uterine hemorrhage near the full period of pregnancy. The quantity of blood discharged in an hour was very great, and was followed

by syncope. The flow of blood had ceased when I saw the patient soon after, and it did not return, though the edge of the placenta was felt detached and slightly protruding through the orifice. The following morning labour-pains came on, the membranes gave way spontaneously, and the child was born alive, without any artificial assistance. The placenta soon followed, without any discharge of blood. She recovered quickly.

(CASE 33.) At six A.M. on the 13th November, 1841, Mr. Rouse, of Walham-green, called me to see a lady eight months pregnant, who had awoke two hours before with a profuse discharge of blood from the uterus. She rose, and sat upon a foot-pan, and it continued to flow till she became faint, and was replaced in bed. At six o'clock it still continued, and a very great quantity had been lost. The os uteri was so high up, and so much directed backwards, that it was extremely difficult to introduce the fingers within the orifice to discover if the placenta presented. At last we succeeded in ascertaining that it adhered to the cervix nearly all round. The orifice was thick, and it admitted two fingers, but it was dilatable, and the hand was immediately and without difficulty passed into the uterus, and the child delivered alive. The placenta soon came away, and the recovery was rapid.

(CASE 34.) January 5th, 1842. At six P.M., called by Mr. Angus, of Greek-street, to a patient residing in Maiden-lane, at the end of the seventh month. A great quantity of blood had been lost, but the strength was little impaired. The os uteri was dilated to the size of a crown, and not rigid. The placenta adhered all round to the cervix. I passed up the hand between the uterus and placenta, where they were most detached, as I think ought to be done in all similar cases, and without difficulty seized and brought down a foot into the vagina. Some difficulty was experienced in extracting the nates through the os uteri. The placenta soon followed the child, which was dead. The mother soon recovered.

(CASE 35.) About the middle of July, 1842, Mr. Harvey, of Great Queen-street, was sent for to a private patient in the eighth month of pregnancy, who had a discharge of blood from the uterus, but not in sufficient quantity to affect her constitution or to excite much alarm. It disappeared in a short time, and she continued quite well till the morning of

the 4th August, when the discharge of blood was renewed. Mr. Harvey found her literally deluged with blood, and the placenta adhering all round to the cervix uteri. The orifice was open to the size of a half-crown, and its edge thin and dilatable. He proceeded at once to deliver by turning, which he accomplished with the greatest ease, and in a short time, and the child was born alive. The delivery was soon followed by faintness, and the usual consequences of great loss of blood, and she was dead before I saw her.

(CASE 36.) Mrs. T——, Gloucester-mews East, was seized with uterine hemorrhage, at the end of the seventh month, but it was not so great as to produce faintness. It went off, and returned six weeks after, and then continued at intervals for eight days. On the morning of the 7th September, 1842, there was a great discharge of blood, with faintness and feebleness of pulse, and coldness of the extremities. At two P.M. I saw the patient with Mr. Tucker and his brother, and on examining found the os uteri dilated to the size of a half-crown, and the placenta adhering everywhere to the cervix. I immediately passed the hand into the vagina, and slowly through the os uteri, which gradually yielded, and permitted it to enter without much force, but the placenta adhered so firmly around, that I was obliged to push the fingers through the placenta to get at the feet and turn. The os uteri did not allow the nates to pass so readily as the hand, but it yielded in a little time, and the delivery was safely accomplished. The placenta was soon expelled, and there was no hemorrhage. There was a great faintness for a quarter of an hour, but the patient recovered, and is now, two days after, going on well.

(CASE 37.) On the 15th October, 1842, I saw in consultation a case of uterine hemorrhage in the eighth month of pregnancy, where the placenta was adhering all round to the neck of the uterus. The discharge of blood had taken place at intervals for two or three weeks. The os uteri was not much dilated, but it was soft and yielding, and I resolved to deliver, without delay, by turning; the hand was passed up without difficulty into the uterus, the membranes were ruptured, and the child extracted dead. The placenta soon followed, the hemorrhage ceased, and the patient quickly recovered.

(CASE 38.) On the 24th February, 1843, Mr. Hawkins requested me to see a patient residing at No. 23, Goodge-

street, Middlesex Hospital. She was in the seventh month of pregnancy, and had been suffering from profuse uterine hemorrhage for three weeks. The os uteri was open to the size of a crown-piece. Immediate delivery being necessary, I passed the hand into the vagina, and endeavoured to introduce it into the uterus to turn the child, but the resistance was so great that I could not succeed without the danger of inflicting an injury upon the parts. I resolved to attempt the delivery with the fore and middle fingers passed between the placenta and uterus, and with these I ruptured the membranes, seized a foot, and speedily extracted the child without having been able to pass the whole hand into the uterus. There was no pulsation in the funis, but in a few minutes the child began to breathe and cry. The placenta was expelled soon after, and the hemorrhage entirely ceased, and the patient recovered.

(CASE 39.) On the 11th July, 1843, Mr. Tucker requested me to see a patient of the Newman-street Lying-in Institution, with profuse hemorrhage in the eighth month of pregnancy. It was a case of partial placental presentation. The membranes were ruptured, the liquor amnii discharged, ergot of rye administered, and the child and placenta were both expelled without further assistance, and the mother recovered.

(CASE 40.) On the 30th December, 1843, I was called by Mr. French, Surgeon to the St. James's Parochial Infirmary, to see a patient in the lying-in ward, who was eight months pregnant, and had been suffering for two weeks from profuse flooding. A great quantity of blood had been lost. Mr. French had attempted to deliver by turning, but the rigid state of the os uteri rendered it impossible to introduce the hand. I felt the edge of the placenta, and as turning was impracticable, I ruptured the membranes and discharged the liquor amnii. Labour-pains did not follow, and the hemorrhage continued undiminished. It being obvious that death would soon take place if the delivery was not very speedily effected, and as there was no alternative, I employed the perforator and crotchet. The placenta soon followed the extraction of the child, the flooding ceased, and the patient got well.

(CASE 41.) On the 25th March, 1843, I was called by Mr. Skegg, of St. Martin's-place, to a lady who was eight months pregnant, and who had been suffering from flooding

for three weeks. The os uteri was open to the extent of a crown-piece, but it was thick and rigid. A large portion of placenta was felt through the os uteri; the membranes had been ruptured, and the liquor amnii had escaped. The os uteri was gently dilated, the binder applied, and stimulants given, but the pains became more and more feeble, and at last entirely ceased, while the hemorrhage continued to increase to an alarming extent. The operation of turning was impracticable, and the child was ascertained from the funis to be dead. The perforator was passed up between the uterus and detached portion of placenta, and the head of the child opened and extracted, but with much difficulty. The placenta followed the child, the flooding entirely ceased, and the recovery was rapid and complete.

(CASE 42.) On the 26th May, 1844, Mr. Angus, of Frith-street, requested me to see a patient, æt. 41, residing in Carnaby-street, with uterine hemorrhage in the eighth month, from placental presentation. For several days the discharge was inoderate, but slight pains coming on, and dilatation of the os uteri taking place, an immense gush of blood suddenly occurred, and immediate delivery became necessary. I felt the edge of the placenta behind, covering about the half of the cervix uteri. I ruptured the membranes and discharged the liquor amnii, but pains did not follow, and the hemorrhage continued. The os uteri was neither sufficiently dilated nor dilatable to allow the hand to be introduced to turn the child. The head was opened, and the child extracted through the rigid os uteri with difficulty. The placenta was soon expelled, and the discharge ceased. The patient recovered most favourably. It will be observed that in all these cases the rigidity of the os uteri, and not the presence of the placenta, was the cause of the difficulty.

(CASE 43.) At 8 P.M., April 3d, 1845, I received a note from Mr. Duffin, of Langham-place, requesting me to go immediately to his assistance in the country. "I think," he said, "I have a case of placenta presentation." I went, and found the case to be as he had stated, and one in which the placenta was adhering all round to the cervix uteri. The lady was eight months pregnant; there had been hemorrhage, but not very alarming, for three weeks, and then suddenly, without any external cause, the blood flowed in large quantities. The os uteri was found but little dilated, and very rigid. A mass of placenta was felt adhering all round.

A large sponge was introduced, and pressed up firmly against the os uteri. The hemorrhage ceased during the night, but at three o'clock in the morning of the 4th, slight labour-pains were experienced, and the blood came away in great gushes from the vagina. The sponge was removed, and Mr. Duffin, on examining, found the os uteri thick and rigid, and only dilated to the extent of a half-crown. On passing the finger through the os uteri, the whole cervix was felt covered with placenta. The blood continued to flow profusely, and there being great faintness, it was considered necessary to attempt to empty the uterus, as the only means of saving her life. After employing all the force which he considered justifiable, and for a sufficient period, to introduce the hand without success, Mr. Duffin withdrew it, believing it to be impossible to turn the child, without certain injury to the uterus. He resolved to re-introduce the sponge, and attempt by this means to control the discharge till delivery should become possible. On examining, I found the os uteri in a condition which left no hope of effecting the delivery by passing the whole hand into the uterus, but recollecting that in similar cases of rigid os uteri I had succeeded in bringing down a foot with the fore and middle fingers where the whole hand could not be introduced, I attempted to grasp a foot in this manner, and succeeded after a few efforts. The trunk and head of the child were drawn down, the placenta soon followed, and the flooding entirely ceased. In six hours the patient had recovered from the immediate effects of the loss of blood, and the shock of the labour, and no bad symptoms followed. The child was dead. The portion of placenta which had been detached when the hemorrhage first occurred was covered with a thin but dark clot of blood, and the whole cavernous or cellular structure of the part was filled up with coagulated blood. The condition of the detached portion of placenta rendered it certain that for some time before delivery no maternal or fetal blood could have circulated through this part of the placenta, and that the hemorrhage in this case had proceeded from the exposed arteries and veins in the uterus. In every case where a portion of the placenta has been for some time detached from the uterus, I have seen it in the same condition, proving that the flow of blood had not proceeded from the placenta, but from the vessels of the uterus.

(CASE 44.) On the 23d of January, 1842, Mr. Kell, of

Bridge-street, Westminster, requested me to see in consultation with him, and the late Dr. Hingeston, a patient, who was in the seventh month of her first pregnancy, and whose pelvis was greatly distorted by rickets. I perforated the membranes, and on the 27th the os uteri was considerably dilated, and the nates were felt presenting. After extracting the body of the child, the head was drawn through the brim of the pelvis with great difficulty by the crotchet.

On the 2d of December, 1844, when the same patient was in the fifth month of her second pregnancy, I induced premature labour by the same means, and the fœtus and its appendages were expelled by the natural efforts, and she recovered most favourably. She again became pregnant, and miscarried about the end of the second month on the 18th of March.

Mr. Kell requested me to see the same patient with him on the 24th August, 1845, she being again five months advanced in pregnancy. I had no difficulty in reaching the os uteri, and passing the point of the stiletted catheter within it and through the cervix, but some force was required to make the instrument enter completely within the uterus, and when this was effected, and the stilet pressed forward in the usual manner, blood escaped instead of the liquor amnii. A profuse hemorrhage took place on the 25th, without any sign of labour. On the 26th it ceased, and I found the os uteri beginning to dilate; the finger was introduced as high as possible, and no part of the ovum could be felt, although we inferred that the placenta was situated over the cervix uteri, and that it had been perforated and partially detached by the point of the instrument. We resolved, if the hemorrhage returned, to introduce a large sponge into the vagina, and press it up against the os uteri, and to check the discharge by the employment of all the other means in our power. A slight oozing of blood continued during the 27th, without faintness; labour-pains commenced on the morning of the 28th, and three hours after, when Mr. Kell saw the patient, he found the whole placenta in the vagina, which he removed with the fœtus and a mass of coagulated blood which lay between them. The patient has recovered without an unfavourable symptom. There was no reason in this case to suspect, and no means to determine, that the placenta adhered to the neck of the uterus before the instrument was introduced and the hemorrhage took place. It was for-

fortunate we did not ascertain the fact that the placenta was adhering to the neck of the uterus, for a knowledge of it might have deterred us altogether from attempting to induce premature labour, which probably would have been fatal to the patient.

(CASE 45.) On Saturday evening, the 20th September, 1845, I saw, in consultation with Mr. Walters, of Bedfordbury, St. Martin's, a patient in the last month of her third pregnancy, who three weeks before had been suddenly attacked with flooding. Although much blood had been lost at different times during the three weeks, yet her strength was but little impaired until the evening when I was called to see her, soon after the escape of a very large quantity of blood, both fluid and coagulated. The pulse could then scarcely be felt: the countenance was that of a person sinking from loss of blood, and at times the faintness was so great that she was quite insensible. The os uteri was sufficiently open to allow the points of the fore and middle fingers to enter, and the placenta was felt adhering to the whole circumference of the neck of the uterus. The hemorrhage still continuing, but the orifice of the uterus, though but little dilated, being apparently in a relaxed state, I resolved, as the only means of preserving her life, to attempt immediately to introduce the hand into the uterus, or the fore and middle fingers only. If the whole hand could not be passed without much force, to rupture the membranes, seize the feet, and extract the child by turning. I acquainted her husband and relatives, before commencing the operation, with her true condition, and expressed my fears that she would die before it was completed, or immediately after, urging strongly at the same time the necessity of having recourse to immediate delivery, as the only means of preserving her life. Stimulants having been freely administered, and the binder applied, the hand was readily introduced into the vagina, and the fore and middle fingers between the placenta, and uterus on the anterior part to the membranes. On endeavouring gently to dilate the os uteri, and pass the whole hand into the cavity, I found that this could not be accomplished without using greater force, and wasting more time, than the urgent circumstances of the patient warranted. I resolved, therefore, to attempt to seize a foot with the fore and middle fingers only passed through the os uteri, which was done almost the same instant that the membranes were ruptured, and the head

of the child pushed aside. The lower extremity was then easily drawn into the vagina, but the os uteri contracted so firmly upon the nates, that strong traction was required some time before they could be brought into the vagina. The trunk and superior extremities and head were then drawn through the os uteri with less difficulty than could have been expected. The placenta not being wholly detached, was left for a short time, and then removed, after the binder had been tightened, and stimulants again freely exhibited. The hemorrhage ceased, the state of dangerous exhaustion into which she had sunk passed slowly away, and she has recovered in the most satisfactory manner.

(CASE 46.) A lady, eight months pregnant, was attacked with uterine hemorrhage on the 21st of August, 1845; the discharge was not very profuse, and produced little effect upon the constitution. At different times both fluid and coagulated blood escaped, but in moderate quantity, until Monday, the 23d of September, when a great gush of blood suddenly took place while she was in the act of dressing. A serous discharge continued until Sunday, the 28th inst., when a great quantity escaped, and faintness was produced. Mr. Byam, of Welbeck-street, soon after made an examination, and felt the placenta through the os uteri, which was soft and yielding, but not dilated to the size of a shilling. The flooding continuing, he soon after repeated the examination, and found the os uteri dilated to the size of a dollar. His hand was then passed up between the uterus and placenta on the anterior part, the membranes ruptured, and the child delivered by turning. An immense discharge of blood followed the extraction of the child. The placenta being wholly detached, was extracted, and the flooding entirely ceased. About an hour after, I saw the patient in a state of the most alarming exhaustion from loss of blood. Though the binder and compress had been firmly applied around the abdomen, and large quantities of brandy administered, the extremities were cold, and I could not feel the pulse at the wrist, and there was almost constant delirium. Finding that there were coagula in the vagina, I removed these, and introduced a large sponge, and pressed it up against the os uteri. For nearly eight hours the patient remained in the most dangerous condition, and scarcely any sensible effect was produced by the warmth and frictions applied to the extremities and surface, and the internal use of stimulants and anodynes. Twelve hours after

delivery the pulse could be distinctly felt, the heat of the surface was beginning to return, and some sleep had been obtained. The exhaustion gradually disappeared, and on the fourth day the mammæ were distended with milk, and she was recovering in the most favourable manner. The child was dead, and the portion of placenta which had been detached, was covered with coagulated blood.

(CASE 47.) 1st December, 1845. At 45, Coleshill-street, Pimlico, I saw, with Messrs. Gaskell, a patient, the mother of nine children, near the full period of pregnancy, who had been attacked with a profuse flooding about two weeks before. A few hours before we met in consultation, several great gushes of blood, followed by extreme faintness, had taken place, and the blood was still flowing copiously. The orifice of the uterus was so much dilated, that the points of two fingers could readily be introduced, and the placenta felt adhering all round to the cervix. We were of one mind about the necessity of immediate delivery by turning the child, and Mr. Gaskell, senior, proceeded at once to the operation, which he accomplished with little difficulty, and in a short space of time. The child was dead. The placenta was soon expelled; soon after its extraction the hemorrhage ceased, and the patient recovered very favourably.

(CASE 48.) May, 1846. Mr. Dalton requested me to see a lady who was in the latter months of pregnancy, and had lost much blood at different periods. The os uteri was situated so high up that it was impossible to determine whether or not the placenta presented, but all the circumstances of the case rendered this highly probable. There being no hemorrhage when the examination was made, we resolved to wait until it should recur, and then immediately to deliver by turning, if the placenta was found at the cervix. A short time elapsed before another great flow of blood took place, and Mr. Dalton promptly delivered, and the patient is now alive and well.

(CASE 49.) On the 11th May, 1846, Mr. Shaw, of Hampstead, sent for me, in great haste, to see a lady in the eighth month of the first pregnancy, who had been seized with alarming hemorrhage three weeks before, without any obvious cause. A great quantity of blood had been lost on the morning of the 11th. At ten P.M. I examined and found the os uteri very rigid, but little dilated, and the placenta everywhere adhering to the cervix. The external parts were

so undilatable, that great difficulty was experienced in passing the hand into the vagina, and I afterwards found it impossible to pass the whole hand through the os uteri to turn the child without the employment of a dangerous degree of force. The fore and middle fingers were therefore passed up between the posterior part of the placenta and uterus, the membranes ruptured, and a foot seized and brought into the vagina. Long-continued and strong traction was necessary before the nates could be brought through the os uteri, and afterwards the superior extremities and head. This was, however, at last safely effected, the uterus contracted, and the placenta was soon expelled, and the hemorrhage ceased. This severe operation, which I almost despaired of accomplishing without some ill consequence, was not followed by a single bad symptom. The child was, of course, still-born. To have torn away the placenta in this case, and left the child within the uterus, would have been an ignorant and a barbarous act.

(CASE 50.) The same day, the 11th May, 1846, Mr. Davidson called me to a case in Charles-street, Manchester-square, of complete placental presentation in the eighth month, with great hemorrhage. Mr. Davidson had passed up his hand into the uterus, and brought down the feet of the child into the vagina before my arrival. I recommended him gently to extract the child without waiting for pains, which he did immediately, and the patient recovered.

(CASE 51.) On Thursday morning, the 13th August, 1846, Mr. Anderson, and Dr. Baber, Brompton-row, requested me to see a case of complete placental presentation in Queen-street. It was the eighth month of the second pregnancy. The os uteri was dilated to the size of a crown-piece, and not rigid. Much blood had been lost, and it was still flowing, and the pulse at the wrist could scarcely be felt when I proceeded to deliver by turning the child with two fingers. Though the whole hand was not passed into the uterus, and I had never performed the operation of turning with so much ease, the patient continued rapidly to sink, and died in less than two hours after delivery. There was a considerable draining of blood after the removal of the placenta, which in this case contributed to produce the fatal result, which probably would not have taken place had the delivery been effected earlier. The patient was, however, an extremely delicate person, and might have been destroyed by the loss of a smaller quantity of blood than she suffered.

(CASE 52.) On the 13th November, 1846, Dr. Milroy, of Fitzroy-square, consulted me respecting a lady under his care who was eight months pregnant, and had been suddenly seized with flooding four weeks before. The discharge had recurred at intervals, and in a dangerous manner the same morning, with great faintness. It was still going on, and there was great faintness with feeble pulse. I passed two fingers through the os uteri, which was high up, little dilated, and unyielding, and felt the placenta adhering all round. The necessity for immediate delivery being obvious, I passed the hand into the vagina, and the fore and middle fingers between the anterior part of the uterus and placenta as high up as possible, seized one of the knees, and soon had the foot and leg in the vagina. Some difficulty was experienced in drawing the nates through the os uteri, but by slow steady traction it at last yielded. The head also was drawn through very gently, and the shock to the constitution which would have resulted from dragging the child at once into the world was entirely avoided. No hemorrhage during the operation. The placenta not being completely detached, was left for an hour, and then removed. This patient had afterwards an attack of uterine and crural phlebitis, from which she recovered.

(CASE 53.) On the 27th November, 1846, with Mr. Beaman, I saw a lady, who had a tumour in the right side of the hypogastrium, which had appeared about a month before. The catamenia had ceased in July, and certain signs of pregnancy were afterwards observed. In December, the tumour enlarged, and occasionally a discharge of serous and sanguineous fluid had taken place from the uterus, which was enlarged. The general health was not much impaired. On the morning of the 17th of January, 1847, a profuse flow of blood took place from the uterus, the orifice of which was dilated considerably, the cervix obliterated, and a soft mass felt within and not adhering to it. It struck me that this mass was a diseased ovum, and I felt strongly tempted to push my finger through the thickened membrane. The good health of the patient and the mass not adhering to the cervix rendered it very improbable that there was any organic disease of the uterus. It felt like a morbid placenta, and I inquired of Mr. Beaman whether if it were so he would feel disposed to remove it. We resolved not to interfere with the actions of the uterus, but to allow it to contract upon its contents,

whatever they might be, and expel them. Pains soon took place, and a diseased placenta and malformed fœtus, with an umbilical cord only a few inches long, were soon expelled, and the patient got well.

(CASE 54.) A few months earlier than this I saw another case with Mr. Scamell, in which the placenta presented, and was expelled before the child. It was the seventh month.

(CASE 55.) At eight P.M. 25th January, 1847, I was called, by Mr. Balderson, to see a patient in James-street, Haymarket, and was informed that Mrs. T——, four hours before, had begun to suffer from profuse flooding, being at the commencement of the eighth month. The os uteri was not then open, and it was impossible to ascertain whether or not the placenta presented. There was a great clot of blood in the vagina. At six the os uteri had begun to dilate and was not rigid. The hemorrhage continued. The os uteri went on dilating with hemorrhage. Suddenly, a short time before my arrival, it became most profuse and alarming; the centre of the placenta was felt over the centre of the orifice of the uterus. Mr. Balderson, wisely thinking that no time was to be lost, immediately passed up his hand between the separated portion of the placenta and uterus, seized the feet, and delivered. The placenta soon followed the extraction of the child, and the flooding ceased. The child was premature and still-born.

(CASE 56.) On the 7th April, 1847, at eleven P.M., I was called by Mr. Skegg, to a patient eight months pregnant, who had been seized with a great flooding in the morning, before rising. It continued without interruption during the whole day, so that a great quantity had been lost before I saw her. The os uteri was dilated to the size of a crown-piece, and the cervix completely covered with the placenta; I passed up the fore and middle fingers of the right hand through the os uteri, ruptured the membranes, seized a knee, and turned. The child was easily extracted, and was alive, and lived.

(CASE 57.) 22d April, 1847. Mr. B. Brookes requested me to see a patient near Clare-market, who was eight months pregnant, and who had been suffering from profuse uterine hemorrhage for ten days. The flooding occurred spontaneously; it had several times nearly ceased, and had returned again with great violence. Labour-pains commenced, and on examining, it was found that a small portion of the

placenta was felt protruding through the os uteri, which was not considered to be sufficiently dilated to allow the hand to be safely introduced to deliver by turning. The membranes were ruptured, the pains increased in strength, and the child was soon expelled dead, and the placenta followed. The labour was completed before I saw the patient, who was very faint, but the hemorrhage had ceased, and the uterus was firmly contracted. On examining the placenta, the detached portion was seen covered with a dark-coloured layer of coagulated blood, and the cavernous structure of the part was completely filled with solid coagula, rendering it obvious that the hemorrhage had not proceeded from the detached part. If the pains in this case had not expelled the child, and the hemorrhage had continued, it was resolved by Mr. Brookes to deliver by craniotomy, as the orifice of the uterus was not in a condition to permit the hand to be introduced without much force, and the patient was so faint that it was obvious she would die speedily from the loss of blood after delivery, in whatever manner it had been effected. Mr. Brookes thought that a madman only could have contemplated tearing away the placenta before delivering the child in this case.

(CASE 58.) On Sunday, the 16th May, 1847, about eleven o'clock at night, Mr. Angus requested me to see a patient with uterine hemorrhage in the ninth month of her first pregnancy. Five weeks before, she had suddenly been attacked with hemorrhage, which lasted for a few hours, during which time she lost about a pint of blood. The hemorrhage then ceased, but returned again with violence after some days, so that she was compelled to remain constantly in bed, the least movement producing a return of the flow of blood. "In this state she continued five weeks, subjected to an almost constant draining of blood, and at times losing suddenly about half a pint, more especially on excitement, or making the least exertion. Dull pain occurred on the morning of Sunday, with profuse hemorrhage, which continued at intervals during the day. When I first saw the patient she was very pale, faint, and restless, and the blood was flowing profusely. On examining, I found the os uteri so high up as scarcely to be reached, and the orifice so little dilated as not to admit more than the point of the middle finger, with which the placenta was felt adhering all round to the cervix. I had never met with a more formidable case, as it was not merely

impossible to pass the whole hand, but to introduce two fingers to turn the child. A sponge was introduced into the vagina, and pressed up against the os uteri; cold air was freely admitted, and cold vinegar-and-water applied over the hypogastrium. The hemorrhage was not restrained in the slightest degree by these means, and at two o'clock in the morning it was obvious the patient would soon sink if not delivered. I then passed the whole hand into the vagina, and carried forwards at the back part the middle finger, between the uterus and placenta, where it was detached so as to reach the membranes, which I tore open, and allowed the liquor amnii to escape. The head of the child presented. Two doses of ergot of rye were then given, and a binder firmly applied around the abdomen. For a short time she seemed to rally; active uterine contractions took place, and we hoped that the hemorrhage would be arrested, and the head expelled, without the employment of any other artificial means; but these favourable appearances soon vanished, the flow of blood again took place profusely, the pulse could scarcely be felt; the respiration was hurried, and she incessantly threw her arms around her; stimulants were freely administered without any effect. At six A.M., we resolved to attempt to complete the delivery with the perforator and crotchet. The left hand was completely introduced within the vagina, the fore and middle fingers were with difficulty forced through the os uteri and the head touched, while strong pressure was being made over the fundus uteri. Along the groove formed by these fingers, the perforator was with much difficulty passed up, and the head opened. The crotchet was next introduced along these fingers and passed through the opening in the head, and a fair hold obtained with the points of the fingers outside the head, and the crotchet within; firm, slow, and gradual extracting force was employed, and in about half an hour of great exertion and anxiety, we had the satisfaction of feeling the os uteri gradually dilating and the head descending through it into the pelvis. There was no hemorrhage during the operation, which was completed in another quarter of an hour, and in no long time, with a little artificial assistance, the placenta followed. At eight o'clock the hemorrhage had entirely ceased, the uterus had contracted, and the pulse was in a satisfactory state. In the evening (17th), Mr. Angus informed me that this patient was doing remarkably well,

without one unfavourable symptom, and the subsequent recovery was rapid and complete.

(CASE 59.) On the evening of the 8th of June, 1847, Mr. Humby requested me to see a lady seven months pregnant, who had been attacked six weeks before with uterine hemorrhage. It had occurred profusely four times, and during the day there had been repeated great gushes of blood, with pains at long intervals. When I saw the patient at half-past nine P.M., a very profuse discharge was going on, and the vagina was filled with masses of coagulated blood. The os uteri was high up, and dilated so as to admit the points of five fingers, with which the placenta was felt adhering all round to the cervix. We waited a short time for the arrival of Mr. York, that he might sanction the operation of turning, but the discharge and the symptoms became so alarming, that it was obvious death would speedily take place if the delivery was not completed without delay. I therefore passed my right hand into the vagina, and the fore and middle fingers through the os uteri. Being unable to feel the edge of the placenta, I was obliged to force the fingers through its substance at the anterior part, where it adhered firmly to the cervix. Without introducing the whole hand through the os uteri, which could not have been done without the employment of much force, with the points of the two fingers the membranes were perforated, the head of the child pushed aside, and one of the legs seized with some difficulty, and drawn down into the vagina. As little of the liquor amnii had escaped, the turning was easily effected, but a good deal of time and force were required to draw the trunk and head through the os uteri. The placenta was soon after detached and withdrawn, and in about half an hour the draining of blood ceased. On the ninth, Mr. Humby wrote to inform me that the pulse was only eighty, and that the patient was as well as if it had been a natural labour.

(CASE 60.) At nine P.M. of the 25th of August, 1847, Mr. Davidson called, and requested me to accompany him to the house of a patient in Great James-street, Edgeware-road, who was far advanced in pregnancy, and had suddenly been seized with profuse uterine hemorrhage in the afternoon. We found the os uteri dilated to the size of a crown-piece, and a large portion of the placenta at the anterior part of the cervix; the membranes were felt at the back part, and the head of the child presented. There were no pains, and a

great discharge was going on, with the usual constitutional effects. We ruptured the membranes, and applied a binder firmly round the body, and gave stimulants, but no pains followed. I was obliged to visit another patient in labour at some distance, and on my return found that the flooding had continued, and that Mr. Davidson had made an attempt to deliver by turning the child. A large portion of the funis, without pulsation, was hanging through the os uteri. As the child was dead, and nothing was to be gained by the operation of turning, the delivery was easily accomplished with the perforator and crotchet. The placenta, which had not been wholly detached during the extraction of the child, was removed, and no hemorrhage followed, and the following day she was rapidly recovering, and got well.

(CASE 61.) On the 29th September, 1847, at half-past eight P.M., I received an urgent request from Mr. Weston to see Mrs. C——, in Upper Wellington-street, who was near the full period of her second pregnancy, and who had been attacked five weeks before with a profuse hemorrhage. It had ceased without producing much effect upon the constitution, and had returned repeatedly, but not to an alarming extent, till seven A.M. of the twenty-ninth, when a great discharge took place, which had continued to a greater or less extent, during the day until the night, when I first saw the case. The vagina was then filled with coagula, and the bed was saturated with blood. The os uteri was open to the size of a crown-piece, and not very unyielding. The placenta covered the whole cervix. The countenance was extremely pale, and the pulse so feeble as to be felt with difficulty. Immediate delivery was necessary; but I thought it extremely probable she would speedily sink, whatever was done. The turning was easily accomplished without the whole hand having entered the uterus, or any forcible dilatation being required. The child was slowly extracted, and the placenta being detached, was soon removed. For a short time, the patient appeared comfortable, and there was no hemorrhage, but the discharge soon returned profusely, with restlessness, oppressed breathing and great faintness. The binder, stimulants, cold applications, and a large sponge to the os uteri were all employed without effect; the hemorrhage went on in spite of every thing we could do, and she died two hours after. So much blood had been lost before delivery in this case, that the recovery would have been very

doubtful had no discharge continued after the removal of the placenta.

(CASE 62.) On Saturday, the 9th of October, 1847, Mr. Thorn was called to see a lady in Ebury-street, Pimlico, who was near the full period of her ninth or tenth pregnancy, and had been seized suddenly the same morning with a great flooding. By rest, cold applications, and other means, the discharge of blood diminished greatly in the course of the day, but did not entirely cease, and was accompanied by much faintness. During the two following days (Sunday and Monday), an oozing of blood continued, and on the morning of Tuesday, the 12th, a frightful rush of blood took place, which completely inundated the bed, and she was speedily reduced to a state of the most imminent danger. I saw her at four A.M., deeply alarmed and agitated, with a rapid feeble pulse and great faintness. The vagina was filled with masses of coagulated blood, on removing which, to ascertain the condition of the os uteri, I found the blood flowing from it in a full stream. The orifice was dilated to the extent of a half-crown, and the margin was thick and rigid. A portion of placenta was felt within, behind, and on the right side, and the remainder of the neck of the uterus was covered with the membranes, through which the head of the fœtus was felt. The circumstances were so urgent as to demand immediate delivery—her life could only be preserved by the most prompt interference. But it was obvious that the operation of turning could not be performed without further loss of blood to a considerable extent, and the employment of dangerous force in dilating the os uteri. The most reckless and ignorant person would not, in such a case, have thought of tearing away the portion of placenta felt through the os uteri, and leaving the child within the uterus. The child was soon extracted with the crotchet, as in Mr. Angus's case, the placenta followed, and the hemorrhage gradually ceased. Some hours elapsed before this patient was considered to be in a state of safety, but Mr. Thorne informed me, on the 3d of November, that she was then in perfect health.

(CASE 63.) On the 17th November, 1847, I received the following note from Mr. Miles Marley:—"You will oblige me by coming to 14, Park-terrace, Camden Town. Placenta prævia, and they will not allow me to act." The patient was eight months pregnant—repeated but not very

profuse attacks of uterine hemorrhage for five weeks. A great discharge had taken place a few hours before. Os uteri dilated sufficiently to admit the points of two fingers, the placenta felt within, adhering all round to the cervix. The hemorrhage had ceased ; she would not consent to have any thing done before the return of her husband, who was soon expected, and delay was advisable to allow the os uteri to dilate further. I advised Mr. Marley to remain with the patient, and if hemorrhage returned immediately, to deliver by turning the child. This was done, I was afterwards informed, with the happiest result, and Mr. Marley experienced little difficulty in passing the hand into the uterus and turning the child. Recovered.

SIXTH REPORT.

THE HISTORIES OF FORTY-FOUR CASES OF UTERINE HEMORRHAGE
IN THE LATTER MONTHS OF PREGNANCY, DURING LABOUR,
AND AFTER PARTURITION.

(CASE 1.) October 29th, 1827, Mrs. Turner, of No. 22, Drury-lane, in the eighth and a half month of pregnancy, mother of eight children. Had nearly died from flooding in a former labour. Last night had a severe rigor of three hours' duration, followed by pains at intervals in the region of the uterus. At eight o'clock this morning, a great discharge of blood took place, and at half-past eleven, when I first saw her, a very large quantity of blood had been lost; the countenance was pale, extremities cold, pulse one hundred and twenty, and extremely feeble. Blood still flowed from the vagina. The os uteri soft and very little dilated, and the pains of which she complained produced no sensible effect upon it. I immediately ruptured the membranes, and this was followed by regular strong pains, the disappearance of the hemorrhage, and the descent of the head of the child. The orifice of the uterus was also gently dilated during the pains, and for an hour there was a prospect of the labour being speedily terminated by the natural efforts. The pains, however, again became more and more feeble, and in two hours they ceased completely, and the hemorrhage was renewed, and it was evident she would speedily sink if not delivered artificially. As I had good reason to believe that the child was dead, and feared, from the great exhaustion, she might die during the operation of turning, I had recourse to craniotomy, which was easily performed. The placenta immediately followed the extraction of the child, and large masses of coagulated blood. The hand was passed into the

cavity of the uterus, and at the same time strong pressure made over the hypogastrium, but the uterus would not contract, and a stream of blood flowed over the hand until it was withdrawn altogether. Mr. John Prout then dashed cold water over the naked abdomen, and afterwards applied a binder and compress around the abdomen, and introduced linen rags soaked in vinegar-and-water into the vagina. By these means the hemorrhage was at last arrested, but she afterwards died from inflammation of the uterus.

(CASE 2.) On the 5th November, 1828, at a quarter past two A.M., Mr. Grant, of Thayer-street, called me to see Mrs. Jones, æt. 31, who was in the ninth month of pregnancy, and had been exposed to great fatigue during the whole of the preceding day. At five P.M. of the 4th of November, the membranes gave way, and the liquor amnii was discharged without uterine contractions. Mr. Grant saw her soon after, and found the head presenting,—there was no uterine hemorrhage or unfavourable symptom. At eight o'clock in the evening her husband returned to inform him that she had fainted, and on recovering complained that she could not see the objects around her. There was then a slight oozing of blood from the vagina, and feeble pains. The symptoms gradually put on a more alarming appearance, till half-past two o'clock in the morning. The extremities were then cold, the respiration was laborious, and the pulse could not be felt. Abdomen distended, the os uteri was fully dilated, and the head was sufficiently low in the pelvis for the forceps to be applied. There were feeble pains. I applied the forceps easily, but as she was almost insensible, and it was impossible to preserve her steadily in a position which admitted of the extraction of the head without injuring the soft parts with the instrument, and as the external hemorrhage became much more profuse, and the symptoms more formidable, the blades of the forceps were withdrawn, and the delivery was accomplished in a few minutes by the perforator and crotchet. A large mass of clotted blood followed the child, and soon after the placenta and an immense gush of fluid blood succeeded. The hand was passed into the uterus, and a large quantity of coagula extracted, and the hand was kept some time in the cavity to make it contract, but without success; and the flow of blood continued in spite of pressure, cold, and stimulants, till she sank, at five o'clock in the morning.

(CASE 3.) On the 18th of November, 1829, a midwife

called me to a woman residing at 338, Oxford-street, who was in the ninth month of pregnancy, and had been suddenly attacked with uterine hemorrhage at three o'clock in the afternoon. She had been in perfect health, and had partaken of a hearty dinner, when a gush of blood suddenly took place from the uterus. Slight pains soon followed. I saw her an hour after this, when she was faint, and was suffering much from sickness and vomiting. The os uteri was dilated to the size of half-a-crown, the orifice thick and rigid. I immediately ruptured the membranes, and a large quantity of liquor amnii escaped. The hemorrhage ceased, and the pains became strong and regular. An hour after, the pains had almost entirely gone off, and the flooding returned, with great faintness, hurried breathing, and feeble pulse. It was evident death would soon take place if the delivery were not speedily effected. The thick rigid condition of the orifice rendered turning impracticable, and she was therefore delivered by craniotomy without much difficulty. The abdomen was compressed, and the placenta extracted; but though very little more blood was lost, the extremities became colder, the breathing more laborious, and the vomiting more urgent, and she died in two or three hours after delivery.

(CASE 4.) At four A.M., on the 22d June, 1839, I was requested by a practitioner of great experience and reputation to see a patient in the ninth month of pregnancy, who had awoke two hours before, with pain of the abdomen, and sickness at stomach; vomiting, coldness of the extremities, and great faintness followed. As she was in perfect health at bed-time, the symptoms were believed to arise from indigestion, and some medicine was prescribed for its relief. At four A.M. the symptoms were not relieved, and pains in the lower part of the back began to be experienced, with a slight discharge of blood from the uterus. The orifice of the uterus was slightly open, and the lips thick. The head of the child presented. At five, the hemorrhage increasing, I ruptured the membranes, and gently dilated the orifice with the fingers during the pains. The flow of blood, however, still increased, and the symptoms of sinking became so alarming, that it was evident artificial delivery was the only thing that could save her life. The movements of the child had not been felt since the first attack, and the orifice not being in a condition to allow of the easy introduction of the hand to turn, we resolved to have recourse to the perforator and crotchet. The

delivery was easily accomplished, but though no blood was lost after the extraction of the child, and the placenta soon followed without assistance, she continued gradually to become worse, and died at a quarter to eight o'clock. We examined the body the following morning, and found the uterus soft and uncontracted, with a large dark-coloured clot in its cavity. The softening of the walls of the uterus, which could not be the effect of putrefaction, was so great, that the points of the fingers could readily perforate them. The decidua was found adhering to a great part of the lining membrane of the uterus. The lining membrane itself was seen perfectly natural at the upper and back part of the uterus where the placenta had adhered, and everywhere else. There was not the slightest trace of any portion of the membrane being wanting.

(CASE 5.) On the 16th of April, 1829, I was called to a patient residing at 12, Great White Lion-street, who was at the end of the eighth month of pregnancy, and who had been attacked fourteen days before with a severe flooding. It had returned three or four times to an alarming extent, and this day she was so much affected by it, that it was obvious she would sink, if not speedily delivered. No part of the placenta could be felt through the os uteri, which was soft and dilatable, though but little dilated. The presentation was natural. I ruptured the membranes, dilated the os uteri gently, and made pressure with the binder. Slight uterine contractions followed, and continued regular for a short time, but they gradually went off altogether, and the hemorrhage was renewed to a dangerous extent. I passed up the hand into the uterus, and turned the child without difficulty. It was born alive and well. The placenta was removed soon after, and the hemorrhage did not return, yet she sank into a state of the most alarming exhaustion, and seemed for a considerable time on the point of expiring. She, however, gradually rallied, and in three weeks she was going about and suckling her child as if nothing unusual had occurred.

(CASE 6.) At eight P.M., 24th October, I was requested by the overseers of the parish of St. Andrews, Holborn, to visit a patient in the parochial Infirmary, who was in the ninth month of pregnancy, and had been attacked with profuse uterine hemorrhage two days before, and which still continued. The head of the child presented, the os uteri fully dilated, membranes ruptured, pulse rapid and feeble, extre-

mities and face cold, great faintness. The pains were regular and frequent, but they had no effect in pressing the head forward. Mr. Dunn agreed with me in thinking, that as there was no great hemorrhage going on, and the pains were regular, it would be proper to wait for the natural efforts, and support her strength by stimulants. After an hour, the coldness of the face and extremities had increased, the pulse was more feeble, and the pains, which were feeble and irregular, producing no effect in advancing the head, it was clear she could not be delivered without artificial assistance. The child had not been felt to move for two days. The head being sufficiently low for the forceps, and the parts dilated, I readily applied the instrument and extracted the head. The cord was round the neck, and did not pulsate. The placenta soon came away, and no hemorrhage followed. It would have been better practice in this case to have delivered sooner, by turning or craniotomy. (Case 24.)

(CASE 7.) On the 12th of July, 1835, Mrs. C., when eight months pregnant, had a discharge of blood from the uterus, without any apparent cause. By remaining constantly in the recumbent position, with cold applied to the hypogastrium, the discharge diminished, but never entirely ceased. At six A.M., the 22d inst., the flooding returned, with feeble pains at intervals. At eight, the os uteri was felt closed and high up. At six o'clock, the hemorrhage continued with great faintness, a rapid pulse, and pains in the abdomen like cramps. I ruptured the membranes with difficulty, and discharged the liquor amnii, and gently dilated the orifice with two fingers, and made pressure over the fundus. The pains continued feeble and irregular till seven o'clock at night, when there were great faintness and a feeling of weight and distention of the abdomen. The binder was firmly applied round the abdomen, and wine and other stimulants given, and the pains becoming stronger, the child was expelled dead, with the cord round its neck, at nine P.M. A great quantity of coagulated blood escaped immediately after the child, and the placenta soon followed. More than half of the uterine surface of the placenta was covered by a dark-coloured clot of blood, which firmly adhered to it. This part of it was in a morbid state, being less than one-half thinner than the healthy portion, and the death of the child and hemorrhage were both probably to be referred to this cause. There could be no doubt about the propriety of rup-

turing the membranes in this case when it was done, but it would have been better practice to have delivered six or eight hours after, by turning or craniotomy, when the orifice was so dilatable as to allow of delivery with safety. Where there are symptoms of internal hemorrhage, it is not safe to delay so long to empty the uterus.

(CASE 8.) A lady, eight months pregnant, was attacked with hemorrhage on the morning of the 14th of November, 1838. When I saw her, at five P.M., the medical attendant informed me that the placenta did not present, and that the membranes were ruptured, and the liquor amnii discharged. I found the orifice half dilated, the membranes unruptured, and the hemorrhage still continuing, with great faintness. The membranes were immediately opened, and the hemorrhage ceasing, and the pains becoming strong and regular, the child was expelled putrid in half an hour. The placenta soon came away, and no flooding afterwards took place. The placenta was in a diseased condition, some parts being three times the natural thickness, hard, and of a yellow colour. On cutting into these thickened parts, masses of coagulated blood were found in the interstices of the vessels. It was a perfect specimen of apoplexy of the placenta, and the death of the fœtus, and the accidental separation of the placenta, were both to be referred to this cause. The good effect of rupturing the membranes was most striking in this case.

(CASE 9.) Mrs. Lassiere, Oxendon-street, June 4th, 1836, a patient of the late Mr. Saunier, was on three different occasions attacked with dangerous uterine hemorrhage immediately after the birth of the child. During the last of these attacks, which had nearly proved fatal, I was called to see her after the placenta had been extracted; and the discharge of blood was checked with great difficulty by the introduction of ice into the vagina, the application of cold water to the nates, external parts, and thighs, and the use of the pad and binder. On the 3d of June, 1836, the patient being at the full period, and labour commencing, Mr. Saunier consulted me respecting the treatment which ought to be adopted to prevent the recurrence of such a dangerous accident. I advised him immediately to discharge the liquor amnii by rupturing the membranes, and not to wait for the dilatation of the orifice, and on the pains becoming stronger, to apply the binder round the abdomen, and tighten it as the labour

advanced — to leave the expulsion of the child entirely to nature — to avoid the use of stimulants, and preserve the apartment cool. This was done, and the uterus contracted after the delivery of the child, and the placenta was expelled without assistance in less than an hour, and so little hemorrhage followed, that it was easily restrained by the application of a napkin soaked in vinegar-and-water to the parts. I have repeatedly employed the same practice, with the most satisfactory results, in other individuals who had been repeatedly exposed to the greatest danger from hemorrhage after the expulsion of the child and placenta. The exhibition of the ergot of rye is also indicated in these cases, towards the end of the second stage of labour.

(CASE 10.) At one o'clock in the morning of the 23d of March, 1829, I was called by Mrs. Finlay to a dispensary patient, residing at No. 10, Great Earl-street, who was attacked with uterine hemorrhage in the first stage of labour. The orifice of the uterus was widely dilated, the pains had entirely gone off, and there was great faintness and collapse of the features. I immediately forced my finger through the membranes, held up the head, that all the liquor amnii might flow out, and compressed the uterus above, and gave some stimulant internally. Strong labour-pains soon came on, and a dead child was expelled. The placenta followed, and no hemorrhage afterwards took place. Nothing could answer better than did rupturing the membranes in this case.

(CASE 11.) Mrs. Brodrick, 33, Tyler-street, a patient of the St. George and St. James's dispensary, 28th of June, 1824, at half-past four A.M., without any accident, was seized with uterine hemorrhage and slight pains. At two P.M., several pints of blood in a coagulated state had escaped, the os uteri slightly dilated, and little affected by the pains. I ruptured the membranes, which had now become tense during the pains, and were protruded a little through the orifice. The flooding immediately ceased, the pains became much stronger, and at seven P.M. the child was expelled alive. A great flooding followed, but it ceased on the removal of the placenta, the application of cold water to the external parts, and the binder firmly round the abdomen.

(CASE 12.) On the 4th of September, 1834, I was called to see a woman in the ninth month, who was attacked with uterine hemorrhage after a violent quarrel. The os uteri was rigid, and very little dilated. The membranes could be felt

all around. The vagina had been plugged, and several doses of the ergot of rye given. She was extremely faint. The membranes were ruptured, and she did well.

(CASE 13.) On the 22d of June, 1837, Mr. Walker, of Marylebone-street, called me to see a patient, who had a profuse discharge of blood from the uterus very soon after the commencement of labour. The hemorrhage always increased when the pains went off. She was faint and restless, and was constantly throwing the arms about, and yawning. The upper part of the vagina was filled with clotted blood. The os uteri was soft and considerably dilated, and the membranes were felt all round, and no part of the placenta. The hemorrhage ceased immediately after rupturing the membranes, and in an hour the child was born, and the recovery was rapid.

(CASE 14.) On the 24th of August, 1837, Mr. Gosna requested me to see a private patient, who, after a slight fall, had been seized with a flooding in the eighth month. As the discharge was not very profuse, and the pulse was little affected, I recommended rest in the recumbent position, and other means to be tried, before rupturing the membranes. The placenta was not felt at the neck of the uterus. The hemorrhage went off for about a week, and then returned to so great an extent, that Mr. Gosna discharged the liquor amnii, and the labour was happily completed in a few hours.

(CASE 15.) About the same period, I was called by Mr. Wise, of Princes-street, to a case of flooding in the first stage of labour. I immediately ruptured the membranes, and the child was soon expelled without any return of the discharge.

(CASE 16.) On the 30th of June, 1837, Mr. Balderson, of Poland-street, requested me to see Mrs. H——, who was attacked with uterine hemorrhage in the ninth month of pregnancy. The placenta did not present. I ruptured the membranes at half-past eight P.M., when the os uteri was very little dilated. A dead child was expelled at eleven o'clock, and the placenta, which had been wholly detached, immediately after descended into the vagina. A violent rigor and great faintness followed the birth of the child, but she recovered in the course of a fortnight.

(CASE 17.) On the 20th of November, 1837, a lady, who had been repeatedly delivered by the late Dr. Hugh Ley, was without any premonitory symptoms attacked with a violent

flooding at the commencement of the ninth month of pregnancy. I found the os uteri soft and little open. There was a sense of weight and dull pain in the region of the uterus, but no regular uterine contractions. The hemorrhage was going on when I ruptured the membranes. It immediately after ceased, and in about two hours a dead child was expelled, with the umbilical cord round the neck. I considered this to have been the cause of the detachment of the placenta, as it probably was in some of the other cases contained in this report.

(CASE 18.) At half-past four A.M., 13th May, 1830, I was called to Mrs. P——, æt. twenty-five, residing at No. 22, Gresse-street, Rathbone-place, by Mrs. Wright and March, the midwives in attendance. About eight o'clock the preceding evening, this patient, being in the ninth month of pregnancy, began to have slight labour-pains, and a considerable discharge of blood from the uterus. The pains continued feeble during the night, and recurring at long intervals. At two A.M., the flooding increased, and a large quantity of blood was lost. She did not appear, however, greatly exhausted when I first saw her at half-past four; there were no labour-pains, the os uteri was slightly open and dilatable. I passed up my finger into the os uteri, removed the clots of blood adhering to it, and ruptured the membranes. On the discharge of the liquor amnii, the flooding ceased. By pressing with the finger all round the os uteri, strong pains came on, and the head of the child was soon forced down into the pelvis, and expelled. It was alive. A broad binder was placed round the abdomen before the expulsion of the child, and was afterwards tightened. The placenta came away without difficulty, and the uterus contracting firmly, no hemorrhage followed. The patient suffered little after from the great loss of blood she had sustained.

(CASE 19.) A private patient of Mr. Gardner's, Foley-place, was attacked suddenly in the night with a most alarming hemorrhage from the uterus. She was in the ninth month, and was in perfect health the previous day, and had been exposed to no accident. I saw her three hours after the flooding commenced. The pulse was extremely feeble, and there was great faintness, with laborious breathing. The os uteri was very little dilated, and on passing the finger I felt the smooth membranes all round. I ruptured the membranes,

and gently dilated the orifice with two fingers. The hemorrhage immediately ceased, and the pains becoming strong and regular, the child was expelled dead in an hour and a half. The placenta being wholly detached, followed the child, and hemorrhage, which had nearly destroyed the patient, again took place. Strong compression of the abdomen, and the vigorous application of cold to the external parts and nates, with stimulants, arrested it, and the patient was soon perfectly restored to health.

(CASE 20.) At five A.M., on the 29th November, 1833, a female, æt. thirty, and eight months pregnant, was attacked with uterine hemorrhage. At eleven A.M., when I first saw her, about two quarts of blood had been discharged, and she was pale, and very faint, and the pulse could scarcely be felt. The os uteri was dilated only to the size of a shilling, and the edge thin and soft. The membranes were felt all round and tense. The flooding continued, with slight irregular pains. I applied the binder round the abdomen, and immediately ruptured the membranes, and discharged the liquor amnii, after which strong pains came on, and the flooding ceased. The child, which presented naturally, was expelled dead in less than an hour. The binder was tightened, and in two minutes the placenta, with a great mass of dark coagulated blood, was expelled. A stream of florid blood suddenly began to flow from the vagina, and the most alarming degree of prostration of strength followed all at once. For several hours she was in a state almost of insensibility, without any pulse at the wrist, and at one time seemed beyond the reach of recovery. The discharge being, however, effectually checked by the introduction of ice into the vagina, and the dashing of cold vinegar-and-water over the external parts, and the strength supported by stimulants, she eventually did well. An immense quantity of blood was lost in this case, yet the health was not permanently injured.

(CASE 21.) On the 9th September, 1836, at ten P.M., I was called to Mrs. —, residing at Little Chelsea, who was eight months pregnant, and had fallen down stairs a week before. Hemorrhage to a great extent had taken place the night before, which caused faintness. The discharge ceased, and returned again this afternoon, and it has continued till the present time. The medical gentleman in attendance had examined, and thought the placenta was over the orifice of the uterus, but the membranes were felt all round, and I

could touch no part of the placenta. The orifice of the uterus was considerably dilated. The head presented. Slight pains. Pace pallid. Pulse extremely weak. Flow of blood continues. On rupturing the membranes, a great quantity of liquor amnii escaped. The binder was next applied, and the orifice of the uterus gently dilated during the pains. The child was soon expelled with the cord twisted tightly twice round the neck. It breathed for a few seconds, and then died. The placenta being detached, was soon after extracted, as the flooding still continued. By firm pressure over the fundus uteri, the external application of cold and stimulants, it was at last arrested, but not till the strength of the patient was almost completely exhausted. Twelve hours after, the extremities were cold, the respiration laborious, and the pulse could scarcely be felt. The circulation was restored in twelve hours, and she recovered perfectly well. I would interfere earlier in a similar case, and not trust so confidently to rupturing the membranes.

(CASE 22.) An out-patient of the British Lying-in Hospital was attacked with flooding about the middle of November, 1835, when seven and a half months pregnant. The discharge was not very great, and it produced no great effect upon the constitution. On the evening of the 17th December, 1835, it returned in a much more formidable manner, and continued through the night; and on the following morning, when I first saw her, she was faint, and pale, and the blood was still flowing profusely from the vagina. The whole of its upper part was filled with coagulated blood, which led to the supposition that the placenta presented, which was not the case. The os uteri was soft, thin, and dilated to the size of half-a-crown or more. The smooth membranes were felt all round, and the head presented. When a binder had been applied firmly round the abdomen, I ruptured the membranes, which I found difficult, from their never being put upon the stretch by the pains. Regular labour-pains soon came on after the membranes were ruptured, though the flooding was not entirely suppressed, and in two hours the child was expelled dead. The umbilical cord was round its neck. A large portion of the placenta was covered with a thick dark clot of blood. The structure of this portion of the placenta presented nothing peculiar. It would have been better had this patient been delivered twelve hours earlier by turning or craniotomy. She was so greatly exhausted by the

loss of blood, that for some days it was doubtful if she would recover.

(CASE 23.) On the 11th November, 1837, Mrs. Richards, 17, May's Buildings, was suddenly attacked with uterine hemorrhage when near the end of the ninth month of pregnancy. A quart of blood escaped in a few minutes, which produced a disposition to syncope. I found the os uteri soft and dilatable, but little opened. The head presented. No uterine contractions; faintness gone. Pulse ninety, and not very weak. The horizontal position, cold applications, &c., were recommended, and I left the case to nature, and did not rupture the membranes, which I now think ought to have been done. Regular labour-pains commenced soon after my visit, and continued all the evening till midnight, when the delivery was safely effected without artificial assistance of any kind. The small portion of placenta which had been detached, and had given rise to the flooding, was seen covered with a firm layer of coagulated blood.

(CASE 24.) A lady, in the eighth month of pregnancy, while dressing for dinner, was alarmed with a profuse discharge of blood from the uterus. It continued till she fainted, and fell down insensible on the floor. The pulse soon after was full and frequent, and the attack was preceded by a sense of weight and uneasiness in the hypogastrium. Twelve ounces of blood were drawn from the arm, ice in a bladder was laid over the region of the uterus, and she was kept in a state of rest in the recumbent position for several days. The discharge ceased, and she went to the full period, and was delivered of a healthy living child; but after the expulsion of the placenta, a dangerous hemorrhage followed, which was checked with difficulty by pressure, and the application of cold. She recovered, and was able to suckle her child.

(CASE 25.) On the 5th July, 1840, Mrs. —, æt. forty-one, in the eighth month of her eleventh pregnancy, was seized at five A.M. with an indescribable uneasiness and sense of fulness about the uterine region, with a feeble pulse, but no discharge of blood from the vagina. At three P.M., 6th July, hemorrhage began to take place to a small extent. At ten P.M., there was an immense discharge. Os uteri dilated to the size of a crown, with continual pain. The flooding immediately ceased on the liquor amnii being evacuated by Mr. Owen. At three the following morning, a

dead child was expelled, and the placenta followed, with great masses of coagulated blood. Recovered. The membranes might have been ruptured with propriety before the blood began to flow externally.

(CASE 26.) On the 1st July, 1841, Mr. Owen, of Holborn, requested me to see a patient who was attacked, without any apparent cause, with profuse uterine hemorrhage, in the eighth month. The os uteri he found dilated to the size of half a crown, and thought the placenta was partially adherent to the cervix. Four hours after, there were slight pains, but the discharge continued with great faintness. I found the os uteri rigid, and the membranes unruptured, and could not touch any part of the placenta. The liquor amnii was discharged with difficulty, in consequence of the membranes not being put upon the stretch, from the feebleness of the pains. The flooding continued, with great faintness, for nearly three hours after the artificial rupture of the membranes, when a dead child was expelled. The placenta was wholly detached, and came away immediately, with a great quantity of blood. This patient was exposed to the greatest danger, in consequence of trusting too much to the effect of discharging the liquor amnii.

(CASE 27.) Mr. Jonson, of Grosvenor-place West, called me, on the 19th September, 1841, to see a case of dangerous uterine hemorrhage in the seventh month of pregnancy. It occurred suddenly, and without any apparent cause, and was accompanied with constant vomiting, and distressing restlessness, and a condition approaching to delirium. The placenta did not present. The os uteri was little dilated, and Mr. Jonson had much difficulty, from the same cause as in the last case, in rupturing the membranes. The hemorrhage, however, immediately ceased on the escape of the liquor amnii, and a dead child was soon expelled. Recovered.

(CASE 28.) On the 1st December, 1840, Mr. Pocock, Brompton, was called to a patient in the eighth month, who had suddenly been seized with flooding, and lost in a short time about two quarts of blood. Mr. Pocock suspected that the placenta presented, and from the os uteri being very high up, thick, and little dilated, and the anterior wall of the vagina being pressed down, I had much difficulty in positively ascertaining that the placenta was not within reach of the finger. On rupturing the membranes, a great quantity

of liquor amnii rushed out, strong pains followed, the hemorrhage ceased, and in six hours she was delivered of a living child, and recovered favourably. The umbilical cord was remarkably short in this case, and the placenta came away with the child.

(CASE 29.) On the 31st August, 1840, I was called to a case of uterine hemorrhage, at Lambeth, in the eighth month of pregnancy. Three medical practitioners had examined, and thought they felt the placenta adhering to the cervix, and that the operation of turning was urgently necessary. The upper part of the vagina was filled with coagula, but on removing these I could distinctly feel the smooth membranes all round and unruptured. A dead child was expelled two hours after the discharge of the liquor amnii, with a quantity of coagulated blood. The hemorrhage, which had been considerable during three days before, ceased on the membranes being ruptured, and the patient did well.

(CASE 30.) A lady, about six months pregnant, had suffered from great uterine hemorrhage during three weeks, with feeble irregular uterine contractions. On the 29th May, 1840, when I saw her with Mr. Pocock, the discharge continued. The os uteri was slightly dilated, the pains feeble, and the pulse very rapid. The head presented on rupturing the membranes, which were felt all round, the flooding ceased, and the case ended favourably.

(CASE 31.) A lady, in the ninth month of pregnancy, was attacked with uterine hemorrhage on the 8th December, 1841. It was referrible to no accident. The movements of the fœtus had not been felt for some days. Two hours after the membranes were ruptured, a dead child was expelled with the cord twice round the neck. The placenta came away with the child, and the hemorrhage ceased.

(CASE 32.) In a patient of the St. Marylebone Infirmary, the first labour commenced at six P.M., 1st June, 1841. The membranes were soon ruptured, and in the night the funis prolapsed, and in a short time ceased to pulsate. At six o'clock the following morning, a great hemorrhage took place from the uterus. At eight, when I was called to see her, the extremities were cold, the pulse scarcely perceptible, respiration laborious, and countenance sunk; blood still flowing. The os uteri was about half dilated, and the head entirely above the brim. The head was perforated, but much force was required to draw it into the pelvis. The

placenta, with a great quantity of coagulated and fluid blood, followed the child. The binder was firmly applied to the abdomen, and cold to the external parts, and stimulants, were freely administered. The pulse returned, and there was no further hemorrhage, but she died in a few hours. The body was not allowed to be inspected. Though the membranes had burst spontaneously at an early period of the labour, fatal hemorrhage took place. Great difficulty was experienced in drawing the head through the os uteri after perforation.

(CASE 33.) On the 18th December, 1840, I saw a case of profuse flooding in the first stage of labour, with Mr. Curtis, at 49, Great St. Andrew's-street. The discharge ceased immediately after rupturing the membranes, and in a few hours a dead child was expelled, with the funis twisted firmly three times round the neck. This state of the funis appears to have been the cause of the detachment of the placenta in a considerable number of cases, and not external injury.

(CASE 34.) On the 12th January, 1840, at eleven A.M., Mr. Owen, Holborn, requested me to see a patient under his care, who had been attacked five weeks before with profuse uterine hemorrhage in the seventh month. It returned three weeks after, and produced faintness. It was renewed a third time on the 11th of January, and continued till the day after. The os uteri was so high up, and directed so much towards the sacrum, that I could scarcely reach the anterior lip, and could not succeed in passing the point of the finger through the orifice, so as to ascertain if the placenta was at the cervix. In attempting to pass the finger within the orifice, so much pain was produced, that I was forced to desist, and could not be certain about the precise nature of the case, which I greatly regretted. I did not, however, feel justified in doing more, as the parts were not in a condition to admit of delivery if the placenta had been found to present, and the state of the constitution was such as not to require immediate interference. The pulse eighty, no faintness, extremities warm. I feared the worst, and Mr. Owen undertook to watch the case narrowly. She was directed to remain at rest, and cold to be applied around the pelvis. On the 15th, slight hemorrhage, with labour-pains, occurred, and on examining we were pleased to find the os uteri dilated to the size of a crown, and no portion of placenta to be felt. The membranes were immediately rup-

tured, and all went on well. Mr. Owen remarked, that a great swelling of the veins of the lower extremities, which had existed in this patient till the time the flooding took place, suddenly disappeared afterwards. I inferred from this circumstance, that the mechanical pressure of the gravid uterus on the vessels at the brim of the pelvis, is not alone the cause of varicose veins in the latter months of pregnancy. It occurs in many cases too early to be attributed to pressure, and chiefly depends on congestion of the uterine and iliac veins and vena cava.

(CASE 35.) November 27th, 1841, I was called to a case of flooding near the full period, which had nearly proved fatal before I saw the patient. Hemorrhage had occurred, with slight pains; first early in the morning, but to no great extent. There was a considerable draining of blood during the whole day. The membranes were not ruptured. At seven o'clock, the symptoms becoming alarming, the medical attendant passed the hand into the uterus, which was open, and delivered by turning. He found the whole placenta detached. An immense gush of blood followed, she became cold, faint, and restless, with hurried breathing, and died in half an hour. The membranes should have been ruptured early.

(CASE 36.) On the 19th June, 1842, I was called to see a patient in the eighth month, who had been attacked two hours before with a great flooding. The os uteri was widely dilated, the membranes unruptured, the blood still flowing, and the uterus not acting. A scruple of the ergot had been given without any effect. After giving brandy and water the discharge ceased, and the pains became strong and regular, and the head was soon pressed down to the outlet. The forehead was under the symphysis pubis, and in a short time the child was expelled alive, and the placenta soon followed. The funis was not more than a foot in length, and was inserted into the margin of the placenta, and this part of the placenta on the uterine surface was covered with a thick dark clot of blood, which adhered to it. In by far the greater number of cases of this kind of flooding, the detachment is not the result of accident, and cannot therefore be correctly termed accidental uterine hemorrhage.

(CASE 37.) Mr. Angus, of Greek-street, called me, on the evening of the 10th July, 1842, to a patient who was in the eighth month of pregnancy, and had been suddenly attacked

with profuse hemorrhage. For several days she had experienced an unusual sense of weight and uneasiness about the uterus. She had been exposed to no external accident of any kind. At eleven P.M. the hemorrhage continued. The pulse quick and feeble. Os uteri dilated, so as to admit the points of two fingers. Head presenting. The membranes were so closely applied to the head of the child, that I thought it would suffer from the great force I was obliged to use with the finger in tearing the membranes. Labour-pains followed the discharge of the liquor amnii, and in two hours the labour was safely completed, and the child was alive.

(CASE 38.) On the 4th September, 1838, I was called to a lady who had nearly been destroyed by uterine hemorrhage after the natural expulsion of the placenta. The binder not having been tightly applied, the uterus became filled with blood. The practitioner introduced his hand to remove the coagula and make the uterus contract, but it did not obey the stimulus of the hand, and the flooding went on till there was no pulse at the wrist, and scarcely any consciousness left; and there is little doubt, if the hand had not been withdrawn, that the case would have ended fatally. The binder was firmly applied, with a thick pad over the uterus, a silk handkerchief was passed into the vagina, and cold vinegar and water applied to the nates and external parts, and as much brandy and port wine were given as the stomach would bear. She remained some hours with cold extremities, a pulse scarcely perceptible at the wrist, anxious respiration, and great faintness. As soon as the hemorrhage ceased, the cold applications were removed, and bottles of hot water put to the feet, and the whole body covered with warm blankets. Recovered, without any of the effects usually resulting from great loss of blood.

(CASE 39.) On the 15th June, 1839, I saw a case of flooding with Messrs. Thornton and Richardson, which had very nearly proved fatal. A great discharge having immediately followed the birth of the child, the placenta was removed at six P.M. Four hours after, when I saw the patient, the pulse could scarcely be felt. The hands, feet, and whole surface cold. The pulsation of the carotid arteries scarcely felt. Breathing laborious, the breath cold, mouth open, pupils not dilated. An unconquerable desire to sleep. Consciousness not entirely abolished, and she could see, and knew those

around her. She thought she was dying, but only wished to be allowed to sleep. Mr. Richardson said the symptoms were exactly those witnessed in the worst cases of cholera. She had taken brandy, and I gave her more, which was soon rejected. The hemorrhage having ceased, bottles of warm water were applied to the feet and hands, and warm blankets laid over her. She remained for nearly six hours in this condition, and afterwards slowly rallied. I never saw a case of recovery in which the living powers were more reduced, and I should have recommended transfusion of blood had I felt satisfied that it would have been of any use. She recovered perfectly. A similar case has since occurred.

(CASE 40.) On the 2d February, 1837, a case of dangerous hemorrhage occurred in a lady immediately after the natural expulsion of the placenta. No pulse could be felt at the wrist for some time. She could not endure the compress and binder or pressure of any kind over the uterus, and wine and brandy were immediately rejected by vomiting. The dashing of cold water around the pelvis, and the introduction of pieces of smooth ice into the vagina, were the only means employed, and the flooding gradually ceased, and she recovered.

(CASE 41.) July 15, 1843. A lady in the eighth month, without any accident, seized with sickness at stomach, and a slight oozing of blood : no faintness nor pain : os uteri high up and undilated. Hemorrhage after six hours, followed by faintness and dilatation of the os uteri : membranes ruptured. A dead child soon expelled with the placenta, and a great mass of coagulated blood. Restlessness, vomiting, and great faintness for several hours. Recovered.

(CASE 42.) July 19, 1843. A lady seized with profuse uterine hemorrhage in the seventh month, with great faintness and feebleness of the pulse : os uteri high up : orifice thick and very little dilated : placenta at first supposed to be presenting : membranes ruptured with great difficulty : pains soon followed, and a living child expelled. Recovered.

(CASE 43.) November 2, 1843, death occurred in a patient, soon after the expulsion of a great mass of serous cysts from the uterus. Profuse flooding had been going on for a considerable time before the uterus was emptied of its contents.

About fifteen other cases of severe uterine hemorrhage have been observed, of which one only has proved fatal. In this case profuse flooding had been going on for three weeks before natural delivery. Had the membranes been ruptured, it is probable the fatal result would in this patient have been prevented. On the 24th May, 1848, a lady, under the care of Dr. Duffin, was, without any assignable cause, suddenly seized with a most dangerous flooding. It was not arrested by rupturing the membranes which covered the cervix uteri, evacuating the whole liquor amnii, applying the binder, giving ergot and stimulants, and dilating the os uteri. The speedy artificial extraction of the child by craniotomy saved her life.

The placenta may adhere to any part of the inner surface of the uterus, to the fundus, body, or cervix, and hemorrhage cannot take place to a dangerous extent during pregnancy or labour, unless the connection of the placenta with the uterus has been destroyed. It is from the great semilunar, valvular-like venous openings in the lining membrane of the uterus, and of the arteries which are laid open by the separation of the placenta, that the blood alone flows in uterine hemorrhage. All the different causes of flooding produce their effect, by mechanically separating the placenta from the part of the uterus to which it is attached. The contractions of the uterus and the formation of coagula of blood in the exposed vessels by the separation of the placenta, are the principal means employed by nature for the suppression of all the varieties of uterine hemorrhage. Before delivery, the contractile powers of the uterus cannot be effectually exerted in closing the vessels: and the hemorrhage usually returns till the contents of the uterus be expelled or removed artificially. All the different means which are employed for checking the discharge in uterine hemorrhage, either act by exciting the contractions of the uterus, or promoting the coagulation of the blood itself within the exposed orifices of the vessels. Uterine hemorrhage in the latter months of pregnancy, and during labour, is always accompanied by great danger; it does and ought to excite alarm in all cases, whether it depends on presentation of the placenta or its detachment from the upper part of the uterus; where flooding depends on the first of these causes, the practice universally adopted during the last two centuries has been to deliver artificially, by turning, as soon as the os uteri is sufficiently

dilatable to allow the hand to be introduced without the employment of much force. Where the placenta does not present, the practice generally adopted since the time of Mauriceau has been to rupture the membranes, and leave the child and placenta to be expelled by the natural contractions of the uterus. Where this has been done, and the contractions of the uterus do not follow, and arrest the hemorrhage, and delivery becomes necessary, the preceding cases will show what course ought to be adopted to excite uterine contraction, and close the exposed vessels by the formation of clots.

When flooding takes place during the first stage of labour, the discharge usually ceases when the uterus contracts, and returns during the intervals of the pains. Here the same practice of rupturing the membranes should immediately be had recourse to, but if the flooding should afterwards continue, and the pains become more and more feeble, delivery must be accomplished by the forceps, by craniotomy, or by turning, according to the peculiarities of the case, as described by Smellie. When a dangerous flooding takes place after the delivery of the child, and before the placenta has been expelled, strong pressure should immediately be made over the hypogastrium, to excite uterine contractions, and the placenta be removed. When hemorrhage follows the natural expulsion of the placenta, or its removal from the uterus by art, there may be either a total want of uterine contraction, or the contractions may not be permanent, but be followed by relaxation, and the effusion of a large quantity of blood, which may either appear externally, or remain to become coagulated and distend the uterus. For several hours after delivery in some cases, this alternate relaxation and contraction goes on, to the great hazard of the patient. By far the most important remedies, and those on which I place the chief reliance in such attacks, are constant and powerful pressure over the uterus, and the application of water to the external parts, and the exhibition of stimulants, particularly wine and brandy. The abdomen should be strongly compressed with the binder, and folded napkins placed under it, and in addition the hands of an assistant should be applied over the fundus of the uterus. I have seldom found it necessary to introduce a plug of any kind into the vagina in these cases, but where there has been a draining of blood from the uterus, after the practice now de-

scribed has been adopted, a large piece of sponge has been passed up, which has promoted the coagulation of the blood, and the contractions of the uterus. Perhaps, upon the whole, greater benefit has resulted from introducing smooth pieces of ice into the vagina. I am now convinced, from many cases, that the practice so often employed of passing the hand into the uterus, and pressing its inner surface with the closed fist round and round, to excite it to contract, or to compress the bleeding vessels like a tourniquet, is not only ineffectual for the purpose in the worst cases of this kind of flooding, but that it is attended with mischievous consequences after the flooding has been suppressed.

SEVENTH REPORT.

THE HISTORIES OF THIRTY-FIVE CASES OF RETENTION OF THE PLACENTA.

(CASE 1.) A woman, who was delivered in the British Lying-in Hospital in the month of March, 1829, was seized soon after with pain in the region of the uterus, quickness of the pulse and respiration, and the skin assumed a peculiar dusky hue, and severe pains were experienced in some of the principal joints of the body. She died on the 26th day after her confinement, and on inspecting the body with Dr. H. Davies and Mr. Armstrong, we found a small portion of placenta adhering to the uterus near the fundus, and the veins of the part distended with pus. The cartilages of the right knee-joint, which had become tender and swollen for some time before death, were ulcerated.

(CASE 2.) A patient of a public institution was delivered on the 30th of August, 1831, and a large portion of the placenta was left within the uterus. I saw her on the third day after delivery, when there was fetid, dark-coloured discharge from the vagina. The pulse was feeble, the countenance haggard, and there was constant vomiting and delirium. The orifice of the uterus was so firmly contracted, that two fingers could not be introduced within it, and the placenta felt. Thirty grains of ergot of rye were administered, but it only increased the vomiting and general distress. Another dose was given soon after, but without any good effect; and on the evening of the fifth day after delivery, death took place, with all the symptoms usually observed when a putrid animal poison is introduced into the system. I inspected the body, and found a large portion of the placenta and mem-

branes within the uterus in a black putrid state, and emitting a most offensive odour. All the coats and vessels of the uterus were apparently healthy. The placenta did not appear to adhere with more than the usual firmness to the inner surface of the uterus. As there did not exist any morbid adhesion of the placenta to the uterus in this case, no portion of it would probably have been left within the uterus, had the hand been introduced into its cavity within an hour after the delivery of the child, and before the cervix had contracted; at least from the history of the case I was induced to believe this to be the cause of the misfortune.

(CASE 3.) On the 18th June, 1834, with Dr. H. Davies, I examined the body of a woman who died eighteen days after delivery, from a portion of the placenta being retained, and undergoing decomposition within the uterus. The orifice of the uterus contracted so much after the birth of the child, that the medical attendant found it impossible to remove the whole placenta. For five days she appeared to recover favourably; then the pulse rose to 120, and there were rigors, loaded tongue, sickness at stomach, and diarrhœa, with slight occasional cough and hurried breathing. She became more and more feeble, and died without any suspicion being entertained of the existence of disease of the lungs. I removed the uterus and vagina, and on laying open the latter, a portion of the placenta, in a sloughing state, like a piece of putrid flesh, was seen hanging through the os uteri, and filling the whole of the upper part of the vagina. The uterus was then laid open, and the placenta was found filling its cavity, and loosely adherent to the fundus by the decidua. There was no morbid adhesion of the placenta to the uterus, as they were separated without any force. The portion of placenta within the uterus had undergone a slight degree of decomposition compared to that which hung through the orifice. There was a great quantity of pus in the veins of the uterus, and the lining membrane of the organ and muscular coat, where the placenta adhered, was soft, and as black as ink. The pleura on the right side was inflamed. The right inferior lobe was hepatized, and several deposits of pus in the substance of this portion of the lungs. At one point the pleura appeared to be destroyed by sloughing or gangrene.

(CASE 4.) On the 23d October, 1835, the body of a woman was brought into the St. Marylebone Infirmary, who had died from retention of a portion of the placenta, which ad-

hered with unusual firmness to the inner surface of the uterus. She was delivered on the 11th of October, and a most alarming hemorrhage took place soon after the birth of the child. Several unsuccessful attempts were made by the medical practitioner to extract the placenta, and it was uncertain at the time whether the whole had been removed from the uterus. A serious affection of the brain took place, and she died about ten days after delivery. The late Dr. Sims examined the body, and found the superior longitudinal sinus of the brain filled throughout a great part of its extent by a solid coagulum of lymph, and all the veins on the right side which empty themselves into it distended with lymph, evidently the result of inflammation. The veins on the left side were in the same condition, but to a less extent. There was no trace of inflammation about the uterus—all its vessels were healthy. On laying open its cavity, there was seen adhering to its fundus a portion of placenta as large as a middle-sized orange. On examining more carefully the connection between the uterus and placenta, it appeared that they were united more firmly than natural at one part which did not exceed an inch in diameter. So firm was the union in this case, that the substance of the placenta would have been more easily torn than the adhesion between it and the uterus. The portion of placenta thus adhering to the uterus was harder than natural, and of a yellow colour.

(CASE 5.) On the 14th of August, 1838, Dr. Hall, of Kennington, showed me a uterus, with a portion of placenta, about two inches in diameter, firmly adhering to the upper part of its body. The placenta and uterus were so closely joined together, that they seemed one substance; it was almost impossible to see the line running between them. Yet the placenta could be separated from the inner membrane of the uterus without much force being applied, or any laceration produced. In this instance, the uterus might have been suspended by the placenta, without a separation between them having been produced. The patient from whom this specimen of adherent placenta was removed, resided near Denmark-hill, and was attended in her labour by Mr. Cooke. The cervix uteri contracted so firmly soon after the expulsion of the head of the child, that Mr. Cooke was obliged to employ much force before he could extract the shoulders. No hemorrhage followed the birth of the child; the os uteri closed so completely afterwards in a few minutes,

that all attempts to remove the placenta were unsuccessful, and the umbilical cord was lacerated. Dr. Hall saw the patient some hours after, and as he could not succeed in getting more than one finger into the uterus, he gave up all attempts to extract it, and it remained for several days in the uterus without any unfavourable symptoms taking place. A fetid discharge then began to escape from the vagina, and symptoms of peritonitis supervened. Seven or eight days after delivery, another attempt was made to extract the placenta, and a portion of it was removed. A hook was introduced into the uterus, but it brought away nothing. The patient at last died with the usual symptoms of peritonitis.

(CASE 6.) On the 20th October, 1832, I was called to a patient in a public institution, who had been delivered about two hours before of a living child at the full period, by the natural efforts. The placenta not being expelled in the usual time after, and hemorrhage occurring, the hand was introduced into the uterus, and the cord was torn without any part of the placenta being brought away. The difficulty was believed to arise from hour-glass contraction of the uterus, and a large dose of laudanum was given. I found a portion of the placenta in the vagina, and the neck of the uterus firmly contracted around the remainder. Two fingers were gently insinuated through the os uteri, and the whole placenta was readily extracted. No hemorrhage followed. On the ninth day after delivery, the pulse was very quick and feeble. The region of the uterus was slightly tender on pressure, and there was dyspnœa with pain in the left side of the chest. The symptoms gradually increased, and she died a few days after. The upper lobe of the right lung was covered with a thick layer of false membrane, and hepatized, and there was a considerable quantity of fluid effused into both sacs of the pleura. There was a considerable curvature in the upper part of the spine.

(CASE 7.) On the 4th May, 1839, Mr. Chatto requested me to see a patient who had been delivered the day before, after a lingering labour, of a dead child. The funis was broken with the slightest touch, and the placenta could not be removed. There had been no hemorrhage, but a great disposition to syncope. When I saw the patient, twenty-two hours after, the pulse was rapid, the discharge from the vagina was very offensive, and the neck of the uterus contracted, but not firmly. One finger was passed after another,

until the whole hand entered the cavity of the uterus. The placenta was felt adhering throughout to the uterus, and was separated with difficulty from it. Even after the mass had been grasped by the hand and detached, a small portion still adhered so firmly, that it could not be removed, and was left behind. The hand was re-introduced, and as much of it taken away as was possible. No hemorrhage, but great faintness, followed. For a time she appeared to recover, but the pulse continued rapid and feeble, and towards the end of May the lower extremities swelled. She became delirious, and had the usual symptoms of inflammation of the veins of the uterus. She died about the end of May, and all the femoral and pelvic veins were found plugged up with coagula. The uterus was twice its natural size, and flabby. No portion of placenta was found within the uterus.

(CASE 8.) On the 7th July, 1831, I was requested by a medical friend to see a lady who had been delivered of her sixteenth child on the 28th June. He had attended this lady in seven labours, which were all natural. On this occasion, hemorrhage took place soon after the expulsion of the child, and though the orifice of the uterus was not contracted, the placenta could not be brought away without considerable difficulty after the introduction of the hand, and had a lacerated appearance when extracted, and looked as if a portion had been left within the uterus. On the 7th July, the pulse one hundred and twenty. Great giddiness, and beating of the temples. The tongue was not much loaded, and the appetite continued, and there was no tenderness of the hypogastrium. There was a most offensive dark-coloured discharge from the vagina. The os uteri so open, that the finger could be introduced, and something like a portion of placenta felt within, but it was impossible to take it away with the finger, and we did not consider it safe to employ any other instrument for the purpose. Injections of tepid water, with a weak solution of chloride of soda, were frequently employed, and occasional cathartics, with quinine, wine, and nourishing diet. This plan was continued for several days, when the retained portion of placenta was expelled, and she speedily recovered.

(CASE 9.) On Saturday, 28th September, 1838, I was called to a patient, æt. twenty-three, residing near the Edgeware-road, who had been delivered of her second child

on the preceding Thursday evening, and the greater part of the placenta had been left within the uterus. Repeated attempts had been made by the medical attendant to extract it, but they were unsuccessful. A dark-coloured offensive discharge was flowing from the vagina. The pulse was rapid. Tongue loaded. Nausea, and great headache, and restlessness. I found a portion of the placenta protruding through the os uteri, and had little difficulty in drawing the whole of it into the vagina with the fore and middle fingers of the right hand. Tepid injections of milk and water were recommended. 30th. Discharge diminished in quantity, and without the peculiarly offensive odour. Pulse less frequent. Nausea, and inquietude, and headache gone. Repeated doses of the ergot of rye had been given without any effect upon the uterus.

(CASE 10.) July 28th, 1838, at ten o'clock at night, I was called by a surgeon to extract a placenta, which had been retained eighteen hours after the birth of the child. The cord was torn off in attempting to remove the placenta. No hemorrhage had taken place. I found the cervix uteri so closely contracted, that one finger only could be introduced, and it appeared very improbable that the hand could ever be passed into the cavity so as to grasp the placenta. By cautiously pressing one finger after another through the orifice, the resistance was in the course of an hour so much overcome, that I could feel a considerable portion of the placenta, though the whole hand had not passed through the cervix. By pressing backwards with the fingers the portion of placenta within reach, I at last succeeded in removing the whole mass. No bad symptoms followed. It was the first labour.

(CASE 11.) On the 4th January, 1828, I was called to a case near Covent-garden, in which the placenta had not been expelled in the usual period after the birth of the child. Hemorrhage taking place, the medical attendant passed up his hand into the uterus to extract it, but found it impossible to reach the fundus uteri in consequence of the upper part of the cervix being firmly contracted. He pulled with some force upon the funis, and it soon broke off near its insertion into the placenta. He then administered a dose of laudanum, and left an assistant with the patient to make firm pressure over the fundus uteri. I saw the patient soon after this, and the neck of the uterus being relaxed, I experienced no diffi-

culty in removing it, as it was lying detached in the lower part of the uterus.

(CASE 12.) On the 22d September, 1828, I was called by the assistant matron of the British Lying-in Hospital, to a patient near Drury-lane, to extract the placenta, which had been retained four hours after the expulsion of the child. The cord and a portion of the placenta had come away in the efforts which were made to withdraw it. I found the vagina filled with clots of blood, and the neck of the uterus closely contracted. I had some difficulty in passing two fingers into the cavity of the uterus, and gradually pressing the placenta down into the vagina. No hemorrhage followed, and the recovery was favourable. The whole hand could not possibly have been passed into the uterus, nor was it necessary.

(CASE 13.) January 4th, 1828, called to a patient of the Westminster General Dispensary, residing in Whitcomb-street, with retention of the placenta, who had been delivered of a dead child three hours before at the seventh and half month. The vagina and cervix uteri were very rigid and undilatable, but the resistance they gave was gradually overcome, so that I succeeded in introducing two fingers and the thumb of the right hand through the cervix, and with these extracted the placenta, which was lying loose in the cavity of the uterus. The whole hand could not have been passed through the cervix uteri in this case. No bad symptoms followed.

(CASE 14.) On the 22d April, 1835, a woman who was delivered at the full period in the lying-in ward of the St. Marylebone Infirmary, had retention of the placenta, from the cervix uteri contracting very quickly and firmly after the expulsion of the child. The cord was torn away at its insertion into the placenta. Although not more than four hours elapsed from the birth of the child when I saw the patient, the orifice of the uterus was so firmly closed, that I found it impossible to pass the whole hand, and I succeeded, after a time, in extracting the mass with two fingers. She recovered in the most favourable manner.

(CASE 15.) On the 26th July, 1835, I was called to a case in Charlotte-street, Portland-place, where the cord had been torn off, and the whole placenta had been left within the uterus from four o'clock in the morning till three in the afternoon. A profuse hemorrhage had occurred. Frequent

attempts had been made to remove the placenta, but they were unsuccessful. I passed the whole hand in a conical form slowly through the os uteri, and soon grasped the mass of the placenta and withdrew it. Three drachms of the ergot of rye had been given to this patient during her labour.

(CASE 16.) On the 22d August, 1835, I was called to another case of hemorrhage and retained placenta in Heddon-street, where the cord had been torn away. As a short period had elapsed in this case from the birth of the child, no difficulty was experienced in passing the hand and extracting the whole placenta. The flooding immediately ceased, and no bad symptom followed.

(CASE 17.) Mrs. C——, residing at 3, Stacy-street, was delivered, at 9 A.M., on the 4th March, 1826, of a child at the sixth and a half month. The umbilical cord being soft, was broken by the midwife in attempting to draw out the placenta. I saw the patient four hours after, when the parts had become so contracted, that I could not introduce the hand without employing more force than was proper. The placenta was therefore, of necessity, left within the uterus. The following morning, a brisk cathartic was exhibited, and in the evening the whole placenta came away without any help whatever. No bad symptom followed.

(CASE 18.) At ten A.M., 13th August, 1836, I was called to a woman residing in Dean-street, who had been delivered of a dead child, at the full period, thirty-four hours before. The medical attendant had given several doses of the ergot of rye, and had made repeated efforts to extract the placenta, but without success. I found the os uteri closed, but not firmly. The discharge from the vagina was extremely fetid, which made me determine, if possible, to extract the placenta. The orifice of the uterus gradually yielded to the introduction of three fingers, with which I laid hold of the mass, and withdrew it, without passing the whole hand within the uterus. The recovery was very favourable.

(CASE 19.) On the 29th August, 1835, I was requested by Mr. Johnson of Mortimer-street to see a lady with retained placenta, who had expelled a dead fœtus of six months twenty-four hours before. Two drachms of the ergot of rye had been given to produce uterine contractions, but they had no effect. I found the orifice of the uterus open, the margin thin, and the point of the finger readily touched a portion of hard pla-

centa within the cavity. Two fingers were introduced, and the placenta seized, but it could not be made to descend into the vagina, and I was forced to leave it in the uterus. A cathartic draught was administered the following morning, which produced vomiting and purging, and during its operation the whole placenta was expelled in a yellow indurated state. No bad symptoms followed.

(CASE 20.) At five A.M., 25th December, 1836, I was called to a patient at 6, Lancaster-court, New Bond-street, with hemorrhage and retained placenta. The umbilical cord was twisted firmly three times round the neck of the child, and it was torn from the placenta near its insertion at the instant the child was born. An immense discharge of blood soon followed. An unsuccessful attempt was made to remove the placenta. I saw her an hour after the birth of the child, when a very large quantity of blood had escaped, and the vagina and uterus were also filled with coagula, the binder not having been applied or continued strong pressure over the uterus. I passed my hand and withdrew the placenta, which was partially detached from the uterus. The binder and compresses were applied, cold water dashed over the nates, thighs, and external parts, and as much gin as could be procured given to her, and the hemorrhage entirely ceased, but she died in three hours. The proper means were not employed sufficiently early.

(CASE 21.) Eleven P.M., 12th December, 1837, I was called to a patient who had been delivered five hours, after a protracted labour. Soon after the birth of a child, and before the removal of the placenta, the accoucheur was called to another labour, and before he could return, a great hemorrhage had taken place, and the woman was nearly dead, being wholly unconscious, the extremities cold, and the pulse not to be felt. Some cold vinegar and water had been applied to the external parts before I saw the patient. A long broad sheet having been firmly put around the body, I passed the hand into the uterus, and removed the placenta, which was detached, and grasped by the contracted cervix. No difficulty was experienced in drawing the placenta into the vagina. The patient recovered.

(CASE 22.) On the 28th April, 1840, a woman was delivered at five A.M., and five hours after, the placenta remained within the uterus, the neck of which was contracted, but not very strongly. The whole placenta was within the cavity

of the uterus. The hand was passed into the vagina, but only two fingers could at first be introduced through the orifice, with which the edge of the placenta was felt. Gradually the whole hand was introduced, and the fingers expanded, and the entire mass grasped and extracted without difficulty. This placenta would have been more easily removed four hours before.

(CASE 23.) On the 23d December, 1838, I saw a patient in New Compton-street, with Mr. Marshall, who had been delivered three hours before of a dead child at the seventh month. The placenta was retained. Three or four efforts had been made to pass the hand into the uterus, the cervix of which was closely contracted and rigid. It was a complete case of what is usually termed hour-glass contraction of the uterus. I passed the whole hand into the vagina, and two fingers through the os uteri very slowly and with much difficulty, and without getting the whole hand into the cavity, succeeded in grasping the bulk of the placenta, and drawing it into the vagina. Recovered.

(CASE 24.) On the 6th December, 1840, Mr. Turner, King-street, Bloomsbury, called me to see a lady who had been delivered of a premature child three hours before, and who had retention of the whole placenta. The cervix was so much contracted, that it was impossible to introduce the whole hand into the cavity, and I did not attempt to do this, but passed it into the vagina, and with three fingers gently dilated the orifice, and with their points detached the placenta from the uterus, and pressed it down into the vagina. It came away completely broken up. She recovered without a bad symptom. The mother of this lady had died some years before this from hemorrhage and retained placenta. The death and premature expulsion of the fœtus, and retention of the placenta, were all here produced by the morbid and indurated state of the organ.

(CASE 25.) On the 30th November, 1840, Mr. Young, Piccadilly, requested me to extract the placenta of a private patient, who had been delivered of a premature still-born child five hours before. The cervix uteri was firmly contracted. A good deal of force was required to get the fore and middle fingers through it to reach the placenta, which was firmly adherent to the uterus. With care nearly the whole was extracted in fragments, and though I believed a small portion was left behind, no mischief followed, and no

placenta afterwards escaped. On the same day I met with an example of a placenta having extensive ossific deposits, not only on the uterine surface, but through the substance of the organ. At one time I suspected that ossification of the placenta took place chiefly in the decidual arteries, but in this specimen it was not confined to these vessels, but had taken place apparently in the umbilical arteries and veins, throughout the whole mass.

(CASE 26.) On the 23d January, 1841, Mr. Cross called me to see a private patient under his care, who had been delivered of her third child three hours before, and a few minutes before his arrival. The cord was twisted three times round the neck, and broken across near the placenta, which was inclosed within the uterus. The cervix had contracted firmly immediately after the birth of the child. I passed the whole hand into the vagina, and the fingers one after another with much difficulty through the os uteri, till the hand entered the cavity. The placenta I found adhering almost entirely, but not very firmly to the uterus, and I took it away with the fingers as I would have taken away a sponge or piece of moss, growing from the surface of a rock.

(CASE 27.) October 20th, 1841, Mr. Tucker called me to a patient who had been delivered of a premature dead child eight hours before. The funis was broken off close to its insertion, and the cervix uteri was so contracted, that there was no difficulty in passing two fingers after the whole hand was in the vagina. With these the placenta was gradually brought out of the uterus, and no bad symptoms followed.

(CASE 28.) I attended a lady in labour, who had nearly died in several of her former confinements from hemorrhage and retention of the placenta. Labour began at nine P.M., 29th January, 1840. At six o'clock the following morning, I found the os uteri widely dilated, and the nates presenting. The child was born alive at eight. Hemorrhage took place almost immediately after, though the uterus contracted, and the binder was applied and stimulants given. The flooding continuing, with vomiting and faintness, for a quarter of an hour, and there being no probability of expulsion of the placenta taking place, I passed the hand into the uterus, and felt it adhering all round. I spread the fingers out towards the margin, and pressed it off from the uterus, and removed it. She continued faint and sick, and had an incessant cough the greater part of the day, but she ultimately recovered, and was able to suckle her child.

(CASE 29.) On the 14th January, 1842, I was called to a case in which a profuse hemorrhage had taken place immediately after the birth of the child. The medical attendant promptly passed his hand into the uterus to remove the placenta, but a portion adhered so firmly that he could not separate it from the uterus, and he left it adhering. The discharge continued, and proved fatal in some hours. I examined the body after death, and found one-half of the mass so firmly adhering to the uterus, that I had some difficulty in peeling it off. In this case the placenta adhered more firmly to the uterus, and to a greater extent, than I had ever witnessed before.

(CASE 30.) October 10th, 1838, Mrs. F. Biggs, æt. twenty, No. 20, Great Chapel-street, was delivered of a dead child at the end of the seventh month, three hours before I saw her. The placenta soon after was expelled from the uterus into the vagina, but though the cord was pulled forward as strongly as its strength would admit by Mr. Babington, who was in attendance, the placenta could not make its escape from the orifice of the vagina. The difficulty was found to depend on the pressure of a broad smooth band or septum passing across the vagina from the anterior to the posterior wall. One-half of the placenta was pressed down on the left side of this band out of the vagina, and the other half with the umbilical cord on the right side. With a pair of scissors I divided the placenta into two portions on the left side of the band, and it immediately after came away, and the septum, which had been greatly stretched, and drawn forward, went up into the vagina. On the 16th, I examined the vagina carefully with Mr. Babington, and we found the vagina near the orifice divided into two canals by a broad band passing from the anterior to the posterior surface. It was perfectly smooth, and the parts of the vagina into which it was inserted were neither hard nor irregular, as they are found to be where cicatrices are formed after inflammation and sloughing of the vagina. I considered this as resulting from an original malformation, and probably an instance of imperfectly formed double vagina. She had been previously delivered twice without any difficulty, and since her last confinement there had been no inflammation of the part. She stated that from the first she had invariably experienced great pain during intercourse.

(CASE 31.) In the autumn of 1826, at Odessa, I was called

to the Princess T——, who was attended in her confinement by a Russian midwife. The child was expelled after a few pains, and in removing the placenta the uterus was completely inverted. I saw the lady about half an hour after this fatal accident, but she was already dead. The bed and floor were covered with blood, and the uterus was hanging out between the thighs. I immediately replaced it, but the respiration and action of the heart were gone.

(CASE 32.) On the 17th February, 1843, I saw a patient who had been delivered fourteen hours, and before the uterus had been inverted. The umbilical cord had been twisted tightly round the neck of the child, and the placenta had adhered with unusual firmness to the uterus, and required to be removed artificially. Repeated attempts were made to restore the uterus to its natural condition, but without success, and the fundus still remains in the vagina.

(CASE 33.) On the 14th May, 1843, I saw a patient who had been delivered fourteen days before. The placenta had been retained for several hours, and great force required for its extraction. The hand had been retained a long time in the uterus after the removal of the placenta, for the purpose of exciting it to contract, and prevent hemorrhage. For some days there were no unfavourable symptoms, but she was afterwards seized with hurried breathing, rapid feeble pulse, delirium, sickness at stomach, and other symptoms of phlebitis, and ultimately died.

(CASE 34.) In a case which occurred near Hammersmith, on the 20th May, 1844, the whole placenta had been retained twenty-four hours, and the cervix was firmly contracted. The dilatation was effected with great difficulty, and the placenta was removed, without any bad consequence.

(CASE 35.) 29th August, 1845. No. 27, Crown-court. Delivered at ten A.M. The placenta being retained, Mr. D—— was requested to attend, and found the half of the placenta hanging through the os uteri, which was firmly contracted. Having endeavoured, without success, to dilate the os uteri, he took away the part that was protruding. Another practitioner then saw the patient, and found her so faint and low that he did not interfere. At seven P.M. hurried breathing, pulse scarcely to be felt, vagina full of blood. Os and cervix uteri so firmly contracted, that the points of two fingers could be introduced with difficulty. The dilatation was gradually effected, and the portion of adherent placenta removed, but the patient died soon after.

The causes and consequences of retention of the placenta are obvious from the cases contained in this report. The best method of preventing retention of the placenta is to apply the binder immediately after the birth of the child, to make pressure with the hand over the fundus uteri at short intervals, and slight traction upon the cord downward and backward in the direction of the hollow of the sacrum. By these means the upper part of the uterus usually goes on contracting till the placenta is detached, and pressed down through the os uteri into the vagina. In all cases, whatever the cause of the retention may be, if the placenta at the end of an hour is not detached from the uterus, and expelled, it should be withdrawn artificially. The difficulty of removing the whole or portions of the placenta adhering with more than natural firmness to the uterus, or retained by contraction of the cervix, is only increased by delaying to interfere after an hour has elapsed from the delivery of the child.

EIGHTH REPORT.

THE HISTORIES OF FORTY-EIGHT CASES OF PUERPERAL CONVULSIONS.

(CASE 1.) At Edinburgh, in 1816, I saw an unmarried woman, *æt.* twenty-two, who was attacked with violent convulsions in the ninth month of her first pregnancy. She had numerous fits for twelve hours, and in the intervals remained wholly unconscious. About fifty ounces of blood were drawn from the arm at two bleedings, the head was shaved, and covered with cold lotions, calomel was put upon the tongue, and stimulating enemata thrown up. The fits, however, continued to return with greater frequency and violence, and she was perfectly comatose between them. The os uteri was dilatable, but there was no sign of labour. She appeared so exhausted with the fits, and the pulse was so rapid and feeble, that it was considered improper to take more blood, either generally or locally. Artificial delivery was considered by all the accoucheurs who saw her to be the only means of preserving her life, and the operation of turning was performed. But the symptoms were not alleviated after she was delivered, and she died in no long time. Dr. John Thompson and Dr. Gordon were present at the examination of the body, and except a little unusual fulness in the blood-vessels of the brain, there was no morbid appearance to account for the convulsions. This was the first time I had seen puerperal convulsions, and having been led to believe that copious bleeding would always control the disease, it was natural to feel dissatisfied with the result of this case, and with the absence of any morbid appearance in the brain to account for the symptoms. Fifty ounces of blood were

drawn from the arm, but it was impossible to repeat the bleeding again to the same extent as had been advised.

(CASE 2.) In 1825, when passing through Biala Cerkeu, in the Ukraine, I was informed that a young woman in the last month of her first pregnancy was dying in convulsions. I went to see her, and found that nothing had been done, nor would be allowed by her relations to be done for her relief. She was perfectly comatose, with dilated pupils, and died soon after, without being delivered or bled.

(CASE 3.) Mrs. Littlefield, æt. twenty-six, January 22d, 1827. First pregnancy, seventh month. Eight weeks before, she was suddenly seized with coma, from which she recovered after copious venesection and cupping; cathartics, and cold lotions, and blisters to the head. Headache, giddiness, and partial loss of speech; consciousness and memory, however, remained, and slight hemiplegia of the right side. Pulse ninety. She went to the full time, and her labour was natural, but in a few hours after, convulsions, coma, dilated pupils, and retention of urine, took place, and she died. I examined the brain, and found the upper surface of both hemispheres partially coated with a firm thick layer of lymph, and the brain below this softened. The veins entering the superior longitudinal sinus, were distended with firm coagula of fibrine, and from what I have since seen, I have no doubt that these veins were in a state of inflammation, and that the coagulation of the blood resulted from this. The ventricles of the brain were full of serum, and the walls did not collapse after the fluid had flowed out. Death took place in this case from inflammation of the brain, but it did not appear that she had suffered any injury or was in any way predisposed to such an attack, being a thin delicate woman, with a long slender neck, and a small head. It was impossible to avoid inferring that the state of the uterus was the cause of the affection of the brain, and that no disease would have been set up in the head, had conception not taken place. Blood-letting was not neglected at the commencement of the disease of the brain, and yet it went on to a fatal termination.

(CASE 4.) Æt. twenty, 1827, Little Hungerford-street. First pregnancy, seventh and half month. Unmarried. Had epileptic fits for several years in early life. Headache, drowsiness, loss of memory, paralysis of right inferior extremity, took place after a slight fit of convulsion, followed by coma. V. S. to $\bar{\zeta}$ xii. or $\bar{\zeta}$ xiv. Cupping. Head shaved, cathartics,

low diet. She went to the full period, and was delivered of a living child, and had no fits after.

(CASE 5.) *Æt.* twenty-four, third pregnancy, seventh and half month. 21st June, 1828. Subject to epilepsy in youth. After suffering several days from the uneasy sensation of weight in the head, and giddiness, was suddenly attacked with convulsions of which she has had several fits, and has little or no consciousness in the short intervals. *Os uteri* closed. No symptom of labour. 22d June. No fit, but considerable stupor continued after being bled to twenty ounces: had the head shaved, and enemata administered. Pulse eighty. A second bleeding to twelve ounces. 21th. Copious alvine evacuations. Return of consciousness. Went to the full period, and was safely delivered of a living child by Dr. Stephen Hall.

(CASE 6.) *Æt.* eighteen, first pregnancy, ninth month. 24th January, 1829. Delivered at eleven A.M., labour natural. The expulsion of the placenta was soon followed by a strong fit of convulsion. Venesection was immediately employed to thirty-six ounces, the head shaved, and calomel and an enema exhibited. At four P.M. frequent severe fits, without any intervals of consciousness. The venesection was repeated to sixteen ounces. At eight P.M. the fits and partial stupor continued, when forty drops of laudanum were given. 25th January. Fits continue. Twenty drops of laudanum, and sinapisms to the legs, were then ordered by her medical attendant. 26th January. Several fits in the course of the night. Has taken sixty drops of laudanum in three doses, which appeared to calm the violent agitation after the paroxysms. 27th, ten A.M. Severe and frequent fits during the night. Breathing stertorous. Pulse rapid and feeble. Died on the 28th. I examined the brain, but except a slight turgescence of the bloodvessels of the pia mater, no morbid appearance was observed.

(CASE 7.) Orange-street, Leicester-square, *æt.* twenty-four, unmarried. First pregnancy, ninth month. 9th May, 1828. A weak delicate woman. Had several fits of convulsion in the first stage of labour. *Os uteri* rigid, and imperfectly dilated. Bleeding to twenty-five ounces, and afterwards to twelve. The fits were so violent, that she was severely bruised in different parts of the body. Complete insensibility between the fits. The pains ceased, and the *os uteri* being only partially dilated, and the head being too

high for the forceps, it was opened. The fits soon after ceased. Recovered.

(CASE 8.) Mrs. W., æt. twenty-four, first pregnancy, ninth month. 16th September, 1828. Constipation and headache for several days. Severe fits, and insensible in the intervals. Pupils dilated. Pulse eighty, feeble; face flushed, os uteri slightly dilated. After venesection to thirty-five ounces, and free evacuation of the bowels, the fits ceased, and she was delivered the next day, without assistance, of a living child, but it died thirty hours after, in convulsions.

(CASE 9.) Mrs. P——, æt. thirty-three. Second pregnancy, ninth month. 6th October, 1838. Had convulsions during her former labour. Headache, giddiness, and drowsiness, during the latter months of pregnancy. Venesection recommended, but not employed. In the first stage of labour during the night, several severe fits at short intervals. Muscles of left side most affected. Face flushed; pupils dilated. Pulse rapid and irregular. Os uteri widely dilated. Head pressing through the brim of the pelvis. Venesection to twenty ounces, and cupping from the temples to twelve. The child was born alive the following morning, October 7th, without assistance. The fits soon after ceased, and consciousness partially returned. Left side slightly paralyzed. Pupils dilated. 11th. No return of fits, and the paralysis is gradually disappearing. From this period, she continued slowly to recover the use of the arm and leg. On the 4th January, 1829, she died in a fit of convulsion, with which she was seized soon after taking an emetic without advice. The ventricles of the brain contained serum. A portion of the upper part of the right hemisphere was softened. Both the cortical and medullary parts of the brain were changed into a substance like custard. There were tubercles in the lungs.

(CASE 10.) Mrs. ———, æt. twenty-five, January 27th, 1828. Eighth month. After a violent quarrel with her husband, who came home intoxicated, complained of headache, and general indisposition. At seven A.M. seized with strong convulsions, of which she has had several paroxysms. Eleven A.M. Insensible, tongue lacerated, a bloody foam issuing from the mouth; fits continue with short intervals. Pulse slow, full, and strong. Os uteri dilated. Head of the child low in the pelvis. During the continuance of the fits, the child was expelled without assistance, at eight P.M.

She was first bled to ten, and then to twenty-six ounces, the head shaved and afterwards cupped from the temples twice, to twelve ounces. She recovered, but was afterwards attacked with puerperal mania. Her mouth being sore from the calomel given during the convulsions, it was long before she could be made to believe that it was not the effect of poison from her husband.

(CASE 11.) *Æt.* thirty. Ninth month. 15th April, 1829. Headache, vertigo, great depression of spirits during the seventh and eighth months of pregnancy. Convulsions, and hemiplegia of left side took place seventeen days before labour. She was bled to sixteen ounces, and then cupped to sixteen, and afterwards to twelve. Head shaved, lotions, blisters, and cathartics. The labour was completed without assistance, but she died comatose three days after. Serum was found in the ventricles of the brain. A small scrofulous tumour adhering to the basilar artery. A portion of the right anterior lobe of the cerebrum softened and of a yellow colour.

(CASE 12.) In Brownlow-street, *æt.* thirty. Ninth month of fourth or fifth pregnancy, 1829. Violent convulsions and insensibility in the intervals for twenty-four hours, without any sign of labour. After repeated cupping, enemata, and calomel, the fits continued with undiminished violence. It was then agreed, after a consultation, that she should be delivered artificially, though the os uteri was firmly closed. I was obliged to employ great force before the hand could be passed into the uterus, and the turning completed. When the trunk and extremities of the child had been delivered, the neck of the uterus grasped the neck of the child like a strong rope, and much and long-continued force was required to overcome the resistance. I at last succeeded in extracting the head, and the convulsions immediately ceased, and she recovered rapidly.

(CASE 13.) Mrs. Allen, *æt.* twenty, 11, Noel-street. First pregnancy, eighth month. 1829. A very thin, delicate, hysterical woman. Headache and giddiness for several days. From twenty to thirty severe fits of convulsion during fifteen hours. Insensible in the intervals. Pulse eighty, face flushed, bowels costive. Labour came on twenty-four hours after the first attack, and a dead child was soon expelled. No fit after delivery. Consciousness did not return for several days. Uterine and crural phlebitis followed. Venesection

first to twelve, and then to twenty ounces. Head shaved. Ice to the scalp in a bladder, calomel and enemata.

(CASE 14.) About thirty. First pregnancy, near the full period. 23d March, 1829. Labour commenced before the first fit, which was long and severe. Had complained of headache and giddiness for several weeks before. Os uteri fully dilated at ten P.M. About the half of the head in the cavity of the pelvis. The pains ceased after the convulsions occurred, till one A.M. of the following morning, when they returned, and at two o'clock a dead child was expelled. March 24. Partially conscious; no fits. Attacked on the 27th with uterine inflammation, and died in three days. Body not allowed to be examined. Venesection to thirty ounces. Twelve leeches to the temples, head shaved, cold lotions, calomel, enemata, blisters.

(CASE 15.) A young woman in Union-court, at the end of the ninth month of her first pregnancy, and soon after labour commenced, had frequent and violent fits of convulsions. Four pints of blood were drawn by her medical attendant from the temporal artery before I saw her. Os uteri then slightly open. No pain; fits continued five hours, when a dead child was expelled. No fit after delivery, but she continued comatose, and died. In this, and all the following cases, the head was shaved, and cold lotions or ice in a bladder laid over the scalp, and sometimes a blister; calomel put upon the tongue, and stimulating enemata administered.

(CASE 16.) *Æt.* twenty-five. First pregnancy, ninth month. April 8th, 1830. Had hysteria in early life. Frequent fits in the course of twelve hours. Consciousness returned after venesection to thirty ounces. The fits were followed by severe headache, and occasional spasms of the face and extremities. Labour natural.

(CASE 17.) *Æt.* twenty. St. James's Infirmary. First pregnancy, ninth month. January 1st, 1831. Incoherence followed by convulsions, at the end of the first stage of labour. Labour-pains strong and regular, and the greater part of the head in the cavity of the pelvis. The fits were relieved by V. S. first to eighteen and then to ten ounces, and she was delivered in a few hours of a dead child without help.

(CASE 18.) *Æt.* thirty. May 9th, 1832. Had epilepsy when a child. Labour began at eight A.M., 7th May. Membranes ruptured in the night. Os uteri dilated to the size of a crown on the morning of the 8th, pains feeble, complained

of headache. Pulse full, and slow; V. S. to sixteen ounces. Labour continued till the morning of the ninth, when severe convulsions supervened; V. S. to twenty-five ounces; fits and unconsciousness continued for several hours, and the pains went entirely off. The os uteri being rigid and undilated, and the head high up in the pelvis, the head was opened. No fit after delivery.

(CASE 19.) Mrs. —, æt. thirty. First pregnancy, ninth month. Autumn, 1831. Six hours in labour. At the end of the first stage of a protracted labour, incoherence, stupor, and several fits of convulsion. The symptoms were relieved by V. S. to thirty-six ounces. The pains continued, and a living child was expelled.

(CASE 20.) St. Marylebone Infirmary; middle age, December, 1831. Had a number of severe fits soon after the commencement of labour. No relief from copious V. S. The pains having entirely ceased for many hours, and the head of the child being above the brim of the pelvis, and the os uteri only partially dilated, the head was opened. Only one slight fit occurred after delivery, and consciousness gradually returned.

(CASE 21.) In October, 1833, a middle-aged woman had been long in labour with her first child, when convulsions took place without any complaint of headache. V. S. to thirty ounces. A feeble child was born alive. Convulsions ceased immediately after delivery.

(CASE 22.) December, 1833, Mr. Gosna had a case of labour in the St. Martin's Parochial Infirmary, in which violent convulsions took place sixteen hours after the labour began. The patient was twenty years of age, unmarried, and it was her first pregnancy. Os uteri fully dilated, head squeezed into the brim. An ear could not be felt. V. S. to thirty ounces. The fits were more frequent and violent after V. S. Pulse rapid and feeble. Labour-pains had entirely ceased, and she seemed greatly exhausted, and in danger of dying. Head perforated, and great force required to draw it through the pelvis. No fit after delivery. Sensibility returned the day after.

(CASE 23.) Mr. Leech, Poland-street, in December, 1832, called me to see a case of convulsions, in a woman seven months pregnant. The attack seemed to be brought on by drinking brandy. Thirty-two ounces of blood were taken away, and twelve leeches applied to the temples, and cathar-

tics exhibited. The fits disappeared, and labour came on fourteen days after, and a dead child was expelled.

(CASE 24.) St. Marylebone Infirmary. A young woman, on the 5th July, 1833, after being twenty-four hours in labour with her first child, was seized with delirium and convulsions. Vagina rigid, hot, and tender. Os uteri not fully dilated. Copious V. S. procured no relief; the head, being beyond the reach of the forceps, was perforated and extracted. The fits immediately ceased. Consciousness was not perfectly restored for several days.

(CASE 25.) A young woman, residing in Porter-street, was delivered at three A.M., the 20th May, 1828. Several convulsion fits of no great severity took place, but V. S. was performed to twenty-five ounces, and at one P.M. they had ceased, and consciousness was partially restored. She appeared heavy and oppressed, and complained of headache. Pulse fifty, full and strong. Ten P.M., no return of convulsions. Recovered.

(CASE 26.) In December, 1829, I inspected the body of a woman who had died after suffering from puerperal convulsions. I did not see her during life, but was informed that insensibility and convulsions had come on during labour, which was protracted. The pulse was stated to have been rapid and feeble. Delivery was completed by craniotomy, and she died comatose three days after. She was not bled. A table-spoonful of serum was found at the base of the brain, and great vascularity in the membranes around the tuber annulare observed.

(CASE 27.) A lady, æt. twenty-eight, was suddenly attacked with convulsions eight days after a natural labour. She had ten severe fits in two hours. In the intervals she was completely insensible, with stertorous breathing, dilated pupils, pulse one hundred and ten, feeble. The fits went off after a few hours, but she remained for several days in a drowsy confused state. The attack followed the use of very indigestible food. Twelve ounces of blood were taken from the temples by cupping, and cathartics administered. Recovered.

(CASE 28.) In the St. Marylebone Infirmary, 3d March, 1835, a young unmarried woman was attacked with convulsions at the end of the eighth month. Labour soon began. At 11 A.M. seven fits; neck and face swollen; face presentation; pains have nearly ceased. V. S. to thirty ounces. The

fits continued at short intervals with the utmost violence. I attempted to deliver with the forceps, but it was impossible to retain her for an instant in the same position. Perforation. Four fits took place after delivery, and she seemed dying from exhaustion. Forty drops of liquor opii sedativus were given, after which the fits became much slighter. The dose was repeated by Mr. Hutchinson several times, and the fits gradually went off, and she got well.

(CASE 29.) A lady, about twenty-six years of age, who had been in labour with her first child for no long period, was suddenly seized with convulsions, for which V. S. to thirty ounces was had recourse to. The fits continued with great violence, till the head was pressing upon the perineum, and it was resolved in consultation to deliver with the forceps. While placing the patient in the proper position for the operation, the child was expelled alive by the natural efforts, with the funis round its neck. The convulsions instantly ceased, but she remained for ten hours in a state of stupor.

(CASE 30.) Mrs. P——, æt. thirty-five, a widow in the eighth month of her third pregnancy. For two weeks had suffered from influenza and severe headache. At one P.M., 8th February, 1837, attacked with convulsions. In seven hours had sixteen severe fits. Forty ounces of blood were drawn. At nine P.M., pulse one hundred and thirty, and feeble. Hands and feet cold. Stertorous breathing. When the fits occurred, the muscles on the right side of the body became first affected; in about a minute the spasm left this side, and the muscles of the opposite side became convulsed. Pupils dilated during the fits, and contracted and sensible in the intervals. Membranes ruptured, os uteri slightly dilated. At midnight the fits continued with the utmost violence. She was so exhausted, that bleeding could not be employed, and it seemed probable she would die if not delivered. The os uteri was not sufficiently dilated, nor the head of the child advanced, for the forceps. Only one slight fit occurred after delivery by craniotomy.

(CASE 31.) Mrs. Taylor, 83, Monmouth-street, æt. twenty-five, was seized with drowsiness and distressing headache when in the ninth month of her first pregnancy. These symptoms continued two weeks, and she was attacked with convulsions on the 28th November, 1838. A severe fit of sickness and vomiting preceded the first fit, which took place at eleven A.M.; and at three P.M., she had experienced six

violent fits, and her tongue was much injured. Pulse eighty-four, labour-pains commencing, os uteri high up and undilated. Mr. Marshall, of Greek-street, had bled her to fifteen ounces. Thirty more were drawn from the temples by cupping. On the 29th, the fits had disappeared. On the 2d of December labour came on, and a dead child was soon expelled. She had a fit immediately after the birth of the child, and Mr. M. bled her again from the arm to eighteen ounces, and she recovered favourably; she was a very plethoric woman.

(CASE 32.) The late Dr. Sims informed me, that he was consulted several years before his death about a young lady in the seventh month of her first pregnancy, who was attacked with violent puerperal convulsions. Two pounds of blood were drawn from the arm, and the fits went off, but for some time after she had fits of insensibility, and complained of intolerable headache. These were relieved by the abstraction of a third pint of blood from the arm; but they returned, and the same quantity was abstracted, and eight ounces more by cupping from the temples. She did not entirely recover from these attacks till labour came on, and a dead child was expelled.

(CASE 33.) On the 4th January, 1838, I saw a case of puerperal convulsions near the Strand, with Mr. Brookes. The first fit took place two hours after the birth of the fourth child, on the 1st of January. She had been bled to fourteen ounces. When I saw her, she was in a state of complete coma, with cold extremities and rapid feeble pulse, and she died the following day.

(CASE 34.) A lady returned home from a concert at half-past eleven, Tuesday, 9th May, 1838. An hour after, labour-pains began, and the child was soon born. The placenta came away without hemorrhage. She soon became totally insensible, and continued so till three A.M., when the muscles of the eyelids and lips became convulsed. At six A.M., the stupor continued, the pupils were widely dilated, and the pulse eighty-eight. Fifteen ounces of blood were drawn from the temples by cupping, calomel put upon the tongue, and an enema exhibited. She remained perfectly unconscious during the Wednesday and Thursday, and without convulsions. On Friday there were short intervals of consciousness, and on the day following the stupor entirely disappeared; but she had no recollection of any thing that

had occurred after the time she left the concert-room. Dr. Merriman saw the case, and did not consider general blood-letting necessary.

(CASE 35.) On the 13th March, Mr. Cathrow was attending a lady in her first labour, who was attacked with convulsions at the end of the first stage, without any premonitory symptom. I saw her an hour after, with dilated pupils, and convulsive movements of the muscles of the face, and insensibility. Immediately after the first fit, Mr. Cathrow took twenty-five ounces of blood from the arm. The pains, some time before the fits, had become feeble and irregular, as if the uterine action had been suspended. Just before the first attack, she experienced a sense of weight upon the heart, as if it had been strongly compressed. The pains gradually returned, became strong and regular, and a living child was expelled in an hour and a half. She was nearly comatose during this time, and had continual twitchings of the muscles of the face and eyes. The sprinkling of cold water on the face, applying ammonia to the nostrils, and dilating the external parts, were the only remedies employed. The child lived, and she recovered perfectly. In early life this lady had suffered much from hysteria.

(CASE 36.) Mr. Wade requested me to see a lady with him on the 2d April, 1841, in Chancery-lane. She was in the seventh month of her ninth or tenth pregnancy. The evening before, without complaining of headache or giddiness, had a fit which lasted several minutes, during which she lost her consciousness. The jaws became clenched, and a frothy saliva issued from the mouth. The muscles of the extremities were not convulsed. The following morning a similar fit occurred. Five hours after she did not complain of headache, but there were slight confusion and incoherence, slow and indistinct speech, and a heavy, dull, apoplectic look. Blood was drawn from the temples, cold lotions applied to the head, and calomel and cathartics exhibited, and the affection disappeared. Mr. Wade, who had extensive opportunities at the Westminster Dispensary of observing cases of puerperal convulsion, told me on this occasion that he had examined the brain in several fatal cases of the disease without finding any morbid appearance to account for the symptoms.

(CASE 37.) A young married lady was delivered of a premature still-born child on the 26th April, 1842, by Mr.

Edgar. The following morning she was seized with puerperal convulsions, and had several severe fits at short intervals. When the fits went off, the pupils were contracted, and widely dilated when they were about to return. Thirty-five ounces of blood were taken, and she recovered.

(CASE 38.) September 30th, 1842. A lady, under the care of Mr. Cathrow, who had never suffered from hysteria or catalepsy, became perfectly insensible the instant after the birth of her ninth child; an hour after, the uterus contracted, and the placenta was expelled: there were no convulsions, but all the muscles of the jaws, trunk, and extremities, were rigid. She remained twenty-eight hours in this state without speaking, the hands and feet being drawn inward, the jaws nearly clenched, and the eyeballs drawn upwards; pupils not dilated; pulse eighty, and sharp. A few leeches were applied to the head, and cathartics and antispasmodics given, when the power of swallowing returned. The same occurrence had taken place, but in a much slighter degree, soon after the birth of every child. Nearly the same phenomena have recently been observed in this patient, and with a like result.

(CASE 39.) 23d November, 1842. A young married lady was attacked with mania on the 8th day after the delivery of her first child. She soon became wildly delirious, and died six days after, in convulsions. The pulse being rapid and feeble, depletion was not carried to any great extent. An extraordinary and most distressing state of excitement of the uterine system was observed in the progress of this case, similar to what has been observed where narcotics have been given.

(CASE 40.) November 22d, 1842. A lady, under the care of Mr. Jonson, Grosvenor-place West, became maniacal on the fourteenth day after delivery. In the course of two days she was seized with convulsions, and had a number of severe fits. She recovered completely in a few days, after the repeated application of leeches to the head and hypogastrium, and the use of active cathartics.

(CASE 41.) December 2d, 1842. A lady, æt. 33, was seized with violent convulsions in her first labour, twenty-four hours after the membranes were ruptured. V.S. $\bar{\text{z}}$ xxxv.; the labour-pains continued, and the fits did not return for nearly ten hours. The uterus then having ceased to contract, and several severe fits being experienced, artificial de-

livery was had recourse to. The fits ceased the instant the child was extracted, and she appeared for several weeks to recover, but afterwards died with symptoms of effusion into the brain.

(CASE 42.) October 28th, 1843. A young unmarried woman, St. Marylebone Infirmary, having been long in labour, was seized with convulsions, and during thirteen hours had many violent fits. V. S. twenty ounces. Delivered with the forceps of a living child, and the fits immediately ceased. Urine drawn off a few hours after was not albuminous in the slightest degree. Consciousness returned in twenty-four hours.

(CASE 43.) October 30th, 1843. A young married woman, æt. twenty-six, who had suffered from hysteria, was delivered by Mr. Dunn of a dead child, at six P.M. Convulsions soon followed. V. S. twelve ounces and twenty-five ounces, head shaved, &c. Numerous fits, which became less severe after cupping, and consciousness gradually returned. The urine drawn off was highly albuminous, which disappeared in a few days. Headache and œdema of the lower extremities during the last month of pregnancy. 30th November, restored to perfect health.

(CASE 44.) 17th March, 1845, St. Marylebone Infirmary. A young woman in her first labour, from sixteen to twenty hours. Four fits. Comatose; pupils dilated; head at the outlet of the pelvis; strong uterine contractions. V. S. twenty ounces. An attempt to deliver with the forceps being unsuccessful, the head was opened. Recovered.

(CASE 45.) 23d August, 1845. A young married lady became furiously maniacal ten or twelve days after delivery. Pulse rapid and feeble. Cold was applied to the head, purgatives and acetate of morphia. No depletion. The violent excitement suddenly passed away, and she fell into a state of coma and slight convulsion. Died.

(CASE 46.) 12th April, 1847. A delicate nervous lady, attacked with convulsions, soon after the commencement of her first labour, under the care of Mr. Kell. Twenty violent fits. The excessively rapid and feeble state of the pulse prevented V. S. from being employed. Cupping to fourteen ounces. No relief. The head was within reach of the forceps, but the restless and wholly unmanageable state in which she was, rendered it impossible to deliver without perforation. The fits did not wholly cease for a time after

delivery, but they ultimately did, and she recovered her consciousness for several days. Died comatose.

(CASE 47.) 14th February, 1848. A lady, seven hours after natural labour, complained greatly of headache, and was soon seized with convulsions. V. S. sixteen ounces. Calomel and purgatives. Consciousness returned, but the violent headache continued, and eleven hours after, a severe fit. The application of eight leeches to the temples, and cathartics, were applied, and she recovered completely. This patient, three years before, soon after being delivered of a dead child, had been attacked with convulsions, and had remained insensible for twenty-four hours.

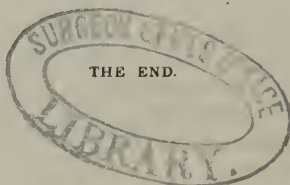
(CASE 48.) On the 22d April, 1848, a lady, near the full period of her second pregnancy, was seized with violent convulsions, after having complained of headache for some hours. Copious venesection was immediately employed, and afterwards leeches to the temples, and every other appropriate remedy. The fits having become still more frequent and severe, without any symptom of labour having supervened, the membranes were perforated, and the liquor amnii discharged. The fits having continued to return with undiminished violence for several hours, it was resolved to dilate the os uteri, and complete the delivery by turning the child. A superior extremity presented, and considerable difficulty was experienced in reaching the feet, and extracting the child. The convulsions and coma were not, however, relieved by delivery, and death took place in no long time.

In this case there was no predisposition to the convulsions that could be discovered, nor any exciting cause. A peculiarly sensitive condition of the nervous system of the uterus appears to have been the sole cause of that state of the brain on which the convulsions and loss of consciousness depended. In the greater number, if not in all cases of puerperal convulsions, the morbid condition of the brain is obviously produced by sympathy with the nervous system of the uterus; and the fits return and increase in violence till the delivery is completed, and sometimes after.

INDEX.

AMNION, dropsy of	p. 111
Arm presentations	121
Ascites and hydrothorax with pregnancy	113
Atrophy of the uterus	78
Bladder, distention during labour	57
—— sloughing of	14
Cæsarian operation	11
Cancer uteri with pregnancy and labour	98
Chorea during pregnancy	120
Cicatrices of vagina	23, 30, 43
Convulsions, puerperal	22, 45, 49, 222
Craniotomy, cases of	13, 14, 17, 43, 47, 94, 97
Distortion of pelvis	38, 48
Dropsy during pregnancy	111
Face presentations	25, 73
Fistulæ, vesico-vaginal	13
Funis and arm presentations	123, 125, 129, 133, 149
Head, separated from the body	130
Heart, diseases of, with pregnancy	107
Hemorrhage from the bowels in pregnancy	119
—— placental presentation	153
—— detachment of placenta	187
Hydrocephalus in the fœtus	64
Induction of premature labour	82
Inversion of the uterus	220
Insanity during pregnancy	120

Labour with convulsions	p. 222
—— preternatural presentation	121
—— with uterine hemorrhage	153
—— with retention of placenta	208
 Mollities ossium, case of	 97
 Narcotics, abuse of, in labour	 80
Nates presentations	143
 Ovarian tumours with pregnancy	 104
 Perforation cases	 47
Perineum, lacerated	44
Phlebitis, cases of uterine	154
Placental presentation, cases of	153
 Recto-vaginal septum torn	 44
 Secale, inefficiency of	 90
 Tumours of uterus with pregnancy	 27, 103
Turning in arm presentations	121
Twin cases	35, 49
 Uterus, inversion of	 220
—— rupture of	41, 69, 87
 Vomiting during pregnancy	 115



MEDICAL BOOKS.

TO THE MEDICAL PROFESSION.

THE following list embraces works on Medical and other Sciences issued by the subscribers. They are to be met with at all the principal bookstores throughout the Union, and will be found as low in price as is consistent with the correctness of their printing, beauty of execution, illustration, and durability of binding. No prices are here mentioned, there being no fixed standard, as it is evident that books cannot be retailed at the same rate in New Orleans or Chicago as in Philadelphia. Any information, however, relative to size, cost, &c., can be had on application, free of postage, to the subscribers, or to any of the medical booksellers throughout the country.

LEA & BLANCHARD, *Philadelphia.*

DICTIONARIES, JOURNALS, &c.

AMERICAN JOURNAL OF THE MEDICAL SCIENCES, quarterly, at \$5 a year.

AN ANALYTICAL COMPEND of the various branches of Practical Medicine, Surgery, Anatomy, Midwifery, Diseases of Women and Children, Materia Medica and Therapeutics, Physiology, Chemistry and Pharmacy, by John Neill, M. D., and F. Gurney Smith, M. D., with numerous illustrations (nearly ready).

CYCLOPÆDIA OF PRACTICAL MEDICINE, by Forbes, Tweedie, &c., edited by Dunglison, in 4 super royal volumes, 3154 double columned pages, strongly bound.

DUNGLISON'S MEDICAL DICTIONARY, 6th ed., 1 vol. imp. 8vo., 804 large pages, double columns.

HOBLYN'S DICTIONARY OF MEDICAL TERMS, by Hays, 1 vol. large 12mo., 402 pages, double columns.

MEDICAL NEWS AND LIBRARY, monthly, at \$1 a year.

ANATOMY.

ANATOMICAL ATLAS, by Smith and Horner, large imp. 8vo., 650 figures.

HORNER'S SPECIAL ANATOMY AND HISTOLOGY, 7th edition, 2 vols. 8vo., many cuts, 1130 pages.

HORNER'S UNITED STATES' DISSECTOR, 1 vol. large royal 12mo., many cuts, 444 pages.

QUAIN'S ELEMENTS OF ANATOMY, by Sharpey, many cuts (preparing).

WILSON'S HUMAN ANATOMY, by Goddard, 3d edition, 1 vol. 8vo., 235 woodcuts, 620 pages.

WILSON'S DISSECTOR, or Practical and Surgical Anatomy, with cuts, 1 vol. 12mo., 444 pages.

PHYSIOLOGY.

CARPENTER'S PRINCIPLES OF HUMAN PHYSIOLOGY, edited by Clymer, 1 vol. 8vo., over 300 illustrations, 3d edition, with many additions.

CARPENTER'S ELEMENTS, OR MANUAL OF PHYSIOLOGY, 1 vol. 8vo., 566 pages, many cuts.

CARPENTER'S COMPARATIVE ANATOMY AND PHYSIOLOGY, revised by the author, with beautiful engravings (preparing).

CONNECTION BETWEEN PHYSIOLOGY AND INTELLECTUAL SCIENCE, 1 vol. 18mo., paper, 25 cts.

MEDICAL BOOKS.

CYCLOPÆDIA OF ANATOMY AND PHYSIOLOGY, based on the large work of Todd, in two vols. large 8vo., numerous cuts (preparing).

DUNGLISON'S HUMAN PHYSIOLOGY, 6th edition, 2 vols. 8vo., 1350 pages, and 370 wood-cuts.

HARRISON ON THE NERVES, 1 vol. 8vo., 292 pages.

MULLER'S PHYSIOLOGY, by Bell, 1 vol. 8vo., 886 pages.

ROGET'S OUTLINES OF PHYSIOLOGY, 8vo., 516 pages.

SOLLY ON THE HUMAN BRAIN, ITS STRUCTURE, PHYSIOLOGY, AND DISEASES (preparing).

TODD AND BOWMAN'S PHYSIOLOGICAL ANATOMY AND PHYSIOLOGY OF MAN, with numerous wood-cuts (publishing in the Medical News), to be complete in one volume.

PATHOLOGY.

ABERCROMBIE ON THE STOMACH, new edition, 1 vol. 8vo., 320 pages.

ABERCROMBIE ON THE BRAIN, new edition, 1 vol. 8vo., 324 pages.

ALISON'S OUTLINES OF PATHOLOGY, &c., 1 vol. 8vo., 420 pages.

ANDRAL ON THE BLOOD, translated by Meigs and Stillé, 1 vol. small 8vo., 120 pages.

BERZELIUS ON THE KIDNEYS AND URINE, 8vo., 180 pages.

BENNET ON THE UTERUS, 1 vol. 12mo., 146 pages.

BUDD ON THE LIVER, 1 vol. 8vo., 392 pages, plates and wood-cuts.

BILLING'S PRINCIPLES, 1 vol. 8vo., 304 pages.

BIRD ON URINARY DEPOSITS, 8vo., 222 pages, cuts.

HASSE'S PATHOLOGICAL ANATOMY, 8vo., 379 pages.

HOPE ON THE HEART, by Pennoek, a new edition, with plates, 1 vol. 8vo., 572 pages.

HUGHES ON THE LUNGS AND HEART, 1 vol. 12mo., 270 pages, with a plate.

PHILIP ON PROTRACTED INDIGESTION, 8vo. 240 pages.

PHILIP ON SCROFULA, 1 vol. 8vo., 350 pages, plates.

PROUT ON THE STOMACH AND RENAL DISEASES, 1 vol. 8vo., 466 pages, coloured plates.

RICORD ON VENEREAL, new edition, 1 vol. 8vo., 256 pages.

VÖGEL'S PATHOLOGICAL ANATOMY OF THE HUMAN BODY, 1 vol. 8vo., 536 pages, coloured plates.

WALSHE ON THE LUNGS, 1 vol. 12mo., 310 pages.

WILSON ON THE SKIN, 1 vol. 8vo., 370 pages; a new edition.

Same Work, with coloured plates.

WILLIAMS' PATHOLOGY, OR PRINCIPLES OF MEDICINE, 1 vol. 8vo., 384 pages.

WILLIAMS ON THE RESPIRATORY ORGANS, by Clymer, 1 vol. 8vo., 500 pages.

PRACTICE OF MEDICINE.

ASHWELL ON THE DISEASES OF FEMALES, by Goddard, 1 vol. 8vo., 520 pages.

BARTLETT ON THE HISTORY, DIAGNOSIS AND TREATMENT OF TYPHOID, TYPHUS, BILIOUS REMITTENT, CONGESTIVE AND YELLOW FEVER, a new and extended edition of his former work (nearly ready).

BENEDICT'S COMPENDIUM OF CHAPMAN'S LECTURES, 1 vol. 8vo., 258 pages.

CHAPMAN ON THORACIC AND ABDOMINAL VISCERA, &c., 1 vol. 8vo., 384 pages.

CHAPMAN ON FEVERS, GOUT, DROPSY, &c. &c., 1 vol. 8vo., 450 pages.

COLOMBAT DE L'ISERE ON FEMALES, translated and edited by Meigs, 1 vol. 8vo., 720 pages, cuts.

COATES' POPULAR MEDICINE, a new edition, brought up to the day, many cuts (preparing).

CONDIE ON THE DISEASES OF CHILDREN, 2d edition, 1 vol. 8vo., 658 pages.

CHURCHILL ON THE DISEASES OF FEMALES, by Huston, 4th edition, 1 vol. 8vo., 604 pages.

CHURCHILL ON THE MANAGEMENT AND MORE IMPORTANT DISEASES OF INFANCY AND CHILDHOOD (preparing).

CLYMER AND OTHERS ON FEVERS, a complete work, in 1 vol. 8vo., 600 pages.

DEWEES ON CHILDREN, 9th edition, 1 vol. 8vo., 548 pages.

DEWEES ON FEMALES, 8th edition, 1 vol. 8vo., 532 pages, with plates.

DUNGLISON'S PRACTICE OF MEDICINE, 2d edition, 2 volumes 8vo., 1322 pages.

ESQUIROL ON INSANITY, by Hunt, 8vo., 496 pages.

MEIGS ON FEMALES, in a series of Letters to his Class, with cuts (a new work, nearly ready).

THOMSON ON THE SICK ROOM, &c., 1 vol. large 12mo., 360 pages, cuts.

WATSON'S PRINCIPLES AND PRACTICE OF PHYSIC, 3d improved edition, by Condie, 1 very large vol. 8vo., over 1000 pages, strongly bound.

MEDICAL BOOKS.

SURGERY.

- BRODIE ON URINARY ORGANS**, 1 vol. 8vo., 214 pages.
- BRODIE ON THE JOINTS**, 1 vol. 8vo. 216 pages.
- BRODIE'S LECTURES ON SURGERY**, 1 vol. 8vo., 350 pages.
- BRODIE'S SELECT SURGICAL WORKS** 1 vol. 8vo., 720 pages.
- CHELIUS' SYSTEM OF SURGERY**, by South and Norris, in 3 large 8vo. vols., over 2000 pages, well bound.
- COOPER ON DISLOCATIONS AND FRACTURES**, 1 vol. 8vo., 500 pp., many cuts.
- COOPER ON HERNIA**, 1 vol. imp. 8vo., 428 pages, plates.
- COOPER ON THE TESTIS AND THY-MUS GLAND**, 1 vol. imp. 8vo., many plates.
- COOPER ON THE ANATOMY AND DISEASES OF THE BREAST, SUR-GICAL PAPERS, &c. &c.**, 1 vol. imper-ial 8vo., plates.
- DRUITT'S PRINCIPLES AND PRACTICE OF MODERN SURGERY**, 3d ed., 1 vol. 8vo., 534 pages, many cuts.
- DURLACHER ON CORNS, BUNIONS, &c.**, 12mo., 134 pages.
- DISEASES AND SURGERY OF THE EAR**, a new and complete work (pre-paring).
- FERGUSON'S PRACTICAL SURGERY** 1 vol. 8vo., 2d edition, 640 pages, many cuts.
- GUTHRIE ON THE BLADDER**, 8vo., 150 pages.
- HARRIS ON THE MAXILLARY SI-NUS**, 8vo., 166 pages.
- JONES' (WHARTON) OPHTHALMIC MEDICINE AND SURGERY**, by Hays, 1 vol. royal 12mo., 529 pages, many cuts, and plates, plain or coloured.
- LISTON'S LECTURES ON SURGERY**, by Mütter, 1 vol. 8vo., 566 pages, many cuts.
- LAWRENCE ON THE EYE**, by Hays, new edition, much improved, 863 pages, many cuts and plates.
- LAWRENCE ON RUPTURES**, 1 vol. 8vo., 480 pages.
- MALGAIGNE'S OPERATIVE SUR-GERY**, with illustrations (preparing).
- MILLER'S PRINCIPLES OF SURGERY**, 1 vol. 8vo., 526 pages.
- MILLER'S PRACTICE OF SURGERY**, 1 vol. 8vo., 496 pages.

- MAURY'S DENTAL SURGERY**, 1 vol. 8vo., 286 pages, many plates and cuts.
- ROBERTSON ON THE TEETH**, 1 vol. 8vo., 230 pages, plates.
- SARGENT'S MINOR SURGERY**, 1 vol. 12mo., with cuts (preparing).

MATERIA MEDICA AND THERA-PEUTICS.

- DUNGLISON'S MATERIA MEDICA AND THERAPEUTICS**, a new edition, with cuts, 2 vols. 8vo., 986 pages.
- DUNGLISON ON NEW REMEDIES**, 5th ed., 1 vol. 8vo., 653 pages.
- ELLIS' MEDICAL FORMULARY**, 8th edition, much improved, 1 vol. 8vo., 272 pages.
- GRIFFITH'S MEDICAL BOTANY**, a new and complete work, 1 large vol. 8vo., with over 350 illustrations, 704 pages.
- GRIFFITH'S UNIVERSAL FORMU-LARY AND PHARMACY**, a new and complete work, 1 vol. large 8vo. (at press).
- PEREIRA'S MATERIA MEDICA AND THERAPEUTICS**, by Carson, 2d ed., 2 vols. 8vo., 1580 very large pages, nearly 300 wood-cuts.
- ROYLE'S MATERIA MEDICA AND THERAPEUTICS**, by Carson, 1 vol. 8vo., 689 pages, many cuts.
- STILLE'S ELEMENTS OF GENERAL THERAPEUTICS**, a new work (pre-paring).
- UNIVERSAL DISPENSATORY**, with many wood-cuts, 1 vol. large 8vo. (pre-paring).

OBSTETRICS.

- CHURCHILL'S THEORY AND PRACTICE OF MIDWIFERY**, by Huston, 2d ed., 1 vol. 8vo., 520 pages, many cuts.
- DEWEES' SYSTEM OF MIDWIFERY**, 11th edition, 1 vol. 8vo., 660 pages, with plates.
- RIGBY'S SYSTEM OF MIDWIFERY**, 1 vol. 8vo., 492 pages.
- RAMSBOTHAM ON PARTURITION**, with many plates, 1 large vol. imperial 8vo., new and improved edition, 520 pages.

MEDICAL BOOKS.

CHEMISTRY AND HYGIENE.

- BRIGHAM ON MENTAL EXCITEMENT, &c., 1 vol. 12mo., 204 pages.
- DUNGLISON ON HUMAN HEALTH, 2d edition, 8vo., 464 pages.
- FOWNE'S ELEMENTARY CHEMISTRY FOR STUDENTS, by Bridges, 2d edition, 1 vol. royal 12mo., 460 large pages, many cuts.
- GRAHAM'S ELEMENTS OF CHEMISTRY, 1 large vol. 8vo. (new and improved edition at press), many cuts.
- MAN'S POWER OVER HIMSELF TO PREVENT OR CONTROL INSANITY, 18mo., paper, price 25 cents.
- PRACTICAL ORGANIC CHEMISTRY, 18mo., paper, 25 cts.
- SIMON'S CHEMISTRY OF MAN, 8vo., 730 pages, plates.

MEDICAL JURISPRUDENCE, EDUCATION, &c.

- BARTLETT'S PHILOSOPHY OF MEDICINE, 1 vol. 8vo., 312 pages.
- DUNGLISON'S MEDICAL STUDENT, 2d edition, 12mo., 312 pages.
- TAYLOR'S MEDICAL JURISPRUDENCE, by Griffith, 1 vol. 8vo., 540 pages.
- TAYLOR'S MANUAL OF TOXICOLOGY, edited by Griffith (at press).
- TRAILL'S MEDICAL JURISPRUDENCE, 1 vol. 8vo., 234 pages.

NATURAL SCIENCE, &c.

- ARNOTT'S ELEMENTS OF PHYSICS, new edition, 1 vol. 8vo., 484 pages, many cuts.
- ANSTED'S ANCIENT WORLD—POPULAR GEOLOGY, with numerous illustrations (nearly ready).
- BIRD'S NATURAL PHILOSOPHY, from a new London edition, 1 vol. royal 12mo., many cuts (at press).
- BREWSTER'S TREATISE ON OPTICS, 1 vol. 12mo., 423 pages, many cuts.
- BABBAGE'S "FRAGMENT," 1 vol. 8vo., 250 pages.
- BUCKLAND'S GEOLOGY AND MINERALOGY, 2 vols. 8vo., with numerous plates and maps.

BRIDGEWATER TREATISES, with many plates, cuts, maps, &c., 7 vols. 8vo., 3287 pages.

CARPENTER'S ANIMAL PHYSIOLOGY, with 300 wood-cuts (preparing).

CARPENTER'S POPULAR VEGETABLE PHYSIOLOGY, 1 vol. royal 12mo., many cuts.

DANA ON CORALS, 1 vol. royal 4to., with an atlas of plates, being vols. 8 and 9 of U. States Exploring Expedition (at press).

DE LA BECHIE'S NEW WORK ON GEOLOGY, with wood-cuts (preparing).

GRIFFITHS' CHEMISTRY OF THE FOUR SEASONS, 1 vol. royal 12mo., 451 pages, many cuts.

HALE'S ETHNOGRAPHY AND PHILOLOGY OF THE U. S. EXPLORING EXPEDITION, in 1 large imp. 4to. vol.

HERSCHELL'S TREATISE ON ASTRONOMY, 1 vol. 12mo., 417 pages, numerous plates and cuts.

INTRODUCTION TO VEGETABLE PHYSIOLOGY, founded on the works of De Candolle, Lindley, &c., 18mo.

KIRBY ON ANIMALS, plates, 1 vol. 8vo., 520 pages.

KIRBY AND SPENCE'S ENTOMOLOGY, 1 vol. 8vo., 600 large pages; plates, plain or coloured.

METCALF ON CALORIC, 1 vol. large 8vo. (preparing).

MULLER'S PRINCIPLES OF PHYSICS AND METEOROLOGY, with five hundred and fifty wood-cuts, and two coloured plates (nearly ready).

PHILOSOPHY IN SPORT MADE SCIENCE IN EARNEST, 1 vol. royal 18mo., 430 pages, many cuts.

ROGET'S ANIMAL AND VEGETABLE PHYSIOLOGY, with 400 cuts, 2 vols. 8vo., 872 pages.

TRIMMER'S GEOLOGY AND MINERALOGY, 1 vol. 8vo., 528 pages, many cuts.

VETERINARY MEDICINE.

CLATER AND SKINNER'S FARRIER, 1 vol. 12mo., 220 pages.

YOUATT'S GREAT WORK ON THE HORSE, by Skinner, 1 vol. 8vo., 448 pages, many cuts.

YOUATT AND CLATER'S CATTLE DOCTOR, 1 vol. 12mo., 282 pages, cuts.

YOUATT ON THE DOG, by Lewis, 1 vol. demy 8vo., 403 pages, beautiful plates.

YOUATT ON THE PIG, 1 vol. 12mo., pages, beautiful plates.

24603

— for 